



A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
MITCHELL BROS. COMPANY
(INCORPORATED).

Vol. XXIII.

CHICAGO, ILLINOIS, FEBRUARY 15, 1905.

No. 8. { ONE DOLLAR PER ANNUM,
SINGLE COPY, TEN CENTS.

F. OBERHELMAN & BRO.

It is now just past thirty years since F. Oberhelman, with N. S. Wolf, established the business now owned and operated by himself and his brother, J. W. Oberhelman, at Sublette, Ill. Situated on the Illinois Central Railroad, midway between Amboy and Mendota, the location was an excellent one, in a rich farming country then coming rapidly into full cultivation. The firm began in a modest way in 1874 by building a small part of the composite structure shown in the accompanying engraving, which they operated for about eight years, by horse power. As the farms increased in number and productiveness, the firm found it necessary to enlarge their elevator facilities to care for the enlarging volume of grain, and so from time to time they added to the storage capacity and installed a steam engine to move their machinery and elevators.

In the meanwhile N. S. Wolf had sold his interest in the business to F. Oberhelman, who in turn, in 1883, sold an interest to his brother, J. W. Oberhelman, thus forming the firm of F. Oberhelman & Bro., who for over twenty years have done business with satisfaction alike to themselves and their patrons who haul their grain to Sublette.

In 1898 another addition of 20,000 bushels' capacity was added to the firm's building and a 16-horsepower Fairbanks-Morse Engine installed. Two controllable dumps also were put in, and a 30,000-pound Fairbanks Hopper Scale added. This served for a few years, but still another addition was recently added, bringing the storage capacity up to

52,000 bushels, with machinery in proportion, all in first-class physical condition.

As side lines, the firm handles lumber and planing mill products, various building materials and coal; so that their men are kept at work at all seasons.

In the Circuit Court at Decatur, Ill., on January 25, when a clerk sued H. Chase for \$1,000, alleged

GRAIN AND HAY DEALERS MEET AT FT. WAYNE, IND.

Meetings of the Eastern Indiana Grain Dealers' Association and of the Northwestern Indiana Hay Dealers' Association were held at Ft. Wayne, Ind., on the afternoon of February 2. The grain men met at 2:30 in the parlors of Hotel Randall, and

immediately after their adjournment the hay dealers convened in the same room. As the greater part of those in attendance belonged to both associations, there was very little change in the personnel of the two meetings.

In the absence of President Doan of Ossian, of the Eastern Indiana Grain Dealers' Association, on account of the illness of his wife, E. M. Wasmuth, vice-president, presided, with C. G. Eggly at the secretary's desk. After the reading of the minutes of the last meeting, officers were elected, as follows:

For president, E. M. Wasmuth; vice-president, C. E. Bash, Huntington; secretary-treasurer, W. M. Doan, Ossian.

Mr. Doan spoke a few words in behalf of his father, the retiring president, and expressed the latter's thanks to the members for their co-operation with him in making the Association a success during his term of office.

E. L. Carroll of Decatur moved that resolutions of sympathy with Mr. Doan and his wife be passed, and that a copy be spread on the minutes, and also sent to the retiring president. The motion carried.

On motion by Mr. Bash, a hearty expression of thanks was tendered to Mr. Eggly for his indefatigable



ELEVATOR BUILDINGS OF F. OBERHELMAN & BRO., SUBLETTE, ILL.

to be due the plaintiff as his profits on a grain deal placed with a commission house operated by Chase, the latter went to the stand and acknowledged the debt, but said that he would not pay it because it was a gambling debt, for at the time he was running a bucket-shop. He was immediately arrested on a bench warrant charging him with conducting a bucket-shop. He gave bond in the sum of \$400.

igable zeal in working for the Association. He said that to Mr. Eggly was very largely due the Association's brilliant success.

Mr. Eggly responded that just as a new broom sweeps clean, so the new officers were qualified and would undoubtedly carry on the work of the organization thoroughly and well. He paid the members of the Association a compliment by saying that they had always given their hearts to the work, and that they had always responded liberally when called upon for funds or other aid.

The following gentlemen were elected members of the executive committee: J. B. Sale of Bluffton, M. C. Niezer of Monroeville, and Max Krause, Columbia City.

At this point in the proceedings the president introduced A. S. Garman of the Huntley Mfg. Co., who, in a short speech, invited the grain dealers to partake freely from a large bowl of sherbet punch which he had ordered brought to the president's table. Some willing waiters were found and the refreshments were served.

C. S. Bash of Ft. Wayne addressed the meeting on the transportation question and spoke of the universal desire of shippers that the Interstate Commerce Commission should be given more power. Indiana, he said, would shortly have a strong railway commission that would have the power to supervise and control rates.

After a motion by Mr. Carroll had carried that the thanks of the Association should be given Mr. Bash for the work he had given to these important subjects, the meeting adjourned.

THE HAY DEALERS.

Immediately after adjournment of the grain men, President C. F. Davison of Bluffton called for order for the Hay Dealers' Association, and after a short address the election of officers took place.

Mr. Davison was continued in office as president; C. G. Eggly was elected vice-president and C. D. Reed of Pierceton, secretary and treasurer.

Mr. Wasmuth moved that a vote of thanks be tendered Mr. Davison for his efficient services during the past year. The motion carried.

H. G. Morgan of Pittsburg, president of the National Hay Association, was called upon for remarks, and made a strong plea for more interest in Association work. He commended, as an example to all, men like Mr. Bash, who had devoted so much time to the interests of the grain and hay shippers.

After further short addresses, the meeting adjourned.

THOSE PRESENT.

The following were in attendance: H. G. Morgan, J. R. Johnston, Ben Martin, Pittsburg; C. G. Eggly, Berne; E. M. Wasmuth, Roanoke; E. Erhart, Berne; A. F. Files, Muncie; C. F. Davison, Bluffton; A. S. Garman, Akron; D. L. Leas, Waterloo; Harry Hill, George Root, Dan B. Granger, Charles Van Lennen, P. M. Gale, Cincinnati; J. W. McMillan, Van Wert, Ohio; W. M. Doan, Osian; Chas. Holsinger, Kendallville; L. M. Fishbaugh, Bippus; C. D. Reed, Pierceton; J. M. Carmer, Auburn; J. W. Witmer, Graybill; J. S. Lowe, Butler; C. S. Bash, Ft. Wayne; J. W. Brock, Columbia City; M. G. Rohrbach, Madison; A. A. Weber, Huntington; E. L. Carroll, Decatur; Max Krause, Columbia City; H. L. Coombs, South Whitley; M. Niezer, Monroeville; C. E. Bash, Huntington.

STATE WEAIGHER WANTED IN UTAH.

The Grain and Flour Merchants' Exchange at Salt Lake City will ask the legislation of that state to create the office of state inspector of grain weights; and has appointed a committee consisting of A. H. Vogeler, R. E. Miller and G. R. Cleaveland to formulate the ideas of the Exchange.

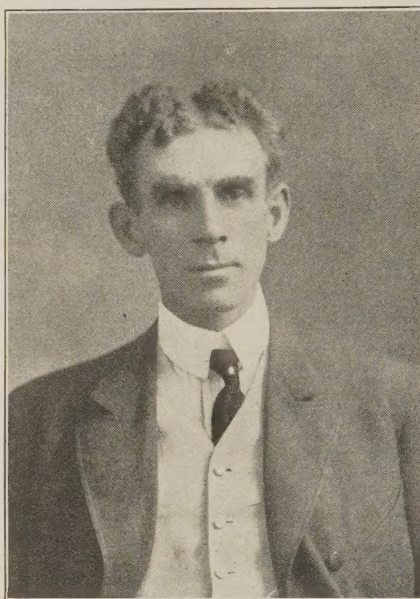
The purpose of the requested legislation is to put a stop, if possible, to the heavy losses now suffered by grain merchants on account of inefficient weighing facilities in the smaller cities and towns of the state. Often, it is said, a car of grain has weighed 7,000 pounds less when it

has reached its destination than the amount charged up to the purchaser; and the deficiency is thought to be due, not to dishonesty, but to incorrect scales. With a state inspector of grain weights, the grain men think, the annoyances on account of shortage, now so frequent, would be done away with, as cars of grain would be weighed by public officials and the certificates of the state inspector or his representatives would be accepted as final.

The same Exchange will also ask for an appropriation to encourage the poultry industry in the state; and for the indorsement of a proposed bill providing for the appointment of a state freight rate commission.

S. P. ARNOT.

After the deed is accomplished it is not difficult to tell the story. That which really challenges the admiration of everyone is the successful forecast of the future; for while it is true that "coming events cast their shadows before," the shadows are seldom seen until the appearance of the reality.



S. P. ARNOT, CHICAGO.

S. P. Arnot, had he judged his special adaptations correctly, would have known, when he left Virginia for Nebraska in 1889, that he was destined for the grain business; for sooner or later the successful man finds the avocation for which nature has especially fitted him. The proof of this lies in the fact of his success, for a large measure of success is seldom achieved by anyone in a position for which temperament and mental attainments have not prepared him.

Mr. Arnot, the secretary and manager of the Updike Commission Co. of Chicago, was born in Greenville, Va., in 1867, and was educated at the University of Virginia in Charlottesville. After removing to Nebraska at the age of 22, he became associated with the Updike Grain Co. of Omaha, and when the Updike Commission Co. was established in Chicago in 1900 by N. B. Updike and G. W. Updike of Omaha, Mr. Arnot was sent East to manage the business. The business for the first three years was wholly commission in grain and provisions, after which a cash grain department was added, which has grown to be a prominent factor in the affairs of the firm.

Mr. Arnot, hailing from both the East and West, unites the conservatism of the former with the aggressiveness of the latter. He is a careful business man, but good opportunities, especially when along the line of the interests of his customers, are sure to be taken advantage of. His career, thus far, as a grain merchant has been crowned with a succession of successes and the future promises their continuance.

[For the "American Elevator and Grain Trade."]

THE USE OF THE AUTOMATIC GRAIN SCALE.

BY W. E. S.

The installation and use of a standard automatic scale in an elevator has many advantages over any other method of weighing.

In these times of strong competition, close margins and rapid fluctuation of prices, it is of utmost necessity that every business man should know exactly what he is doing from day to day, and in the grain trade exact weights are of prime necessity. When shipping grain everyone should know exactly what he places in every car, that he may get correct returns, less only legitimate shrinkage; nor should the shipper be subject to leakage, stealings or other illegitimate loss. Nothing should be left to a guess of even the most expert loader. The question should be how to secure this exact knowledge with the least possible expense and labor. Accurate records of a single shipment may save the cost of proper appliances; and where, as is the rule, the work is entrusted to cheap and incompetent employes, often overworked, the value of the best machines is very important.

The use of standard reliable automatic scales facilitates the handling of grain because they save time, labor and attention, and because they are reliable and accurate, either in shipping, cleaning, mixing or transferring grain, and in all operations when exact weights should be known. They save time, because the grain is weighed as it flows. They need no attention or watching, hence they save in labor; and when $\frac{1}{2}$ cent per bushel is saved and transferred to the right side of the ledger, it often settles the question of profit or loss for the whole year's business. Then they are durable and the wear minimum. The interest on the investment counts for the least item of expense in the business when shortages of hundreds, even thousands, of pounds per car (I have known of one case of 1,100 pounds in a single car) are at once detected and corrected.

Again, unless the grain is properly weighed out, there is no means of knowing the exact condition of stock until the end of the season, and the elevator is empty too late to correct conditions or to save loss. There is no other reliable way of knowing the facts of the run of business or of keeping its record.

The right automatic, or equal balance, scale finds its own level and does not have to be plumb. The ordinary crib house will settle and get out of plumb. It cannot be prevented. As a result, any other kind of scale, with its many combinations, is drawn out of plumb and its accuracy, if not its entire use, destroyed. This one fact is the strongest argument in favor of the automatic scale. The wagon scale must be constantly watched, tested and adjusted. Only an expert can do it. So the ideal method, the cheapest and best, is to receive over one automatic and to ship by another, the one checking against the other.

There is an automatic on the market, acknowledged by state scale experts to be "the only absolutely reliable one in use." It is as accurate and as sensitive as the druggist's prescription scale or the silversmith's balance, all applying the same principle. It tests to within 1-24, or even to 1-160, of one per cent; and in actual work the owners are getting returns within 1-16 of one per cent from terminal points. No other scale ever did such work.

Finally quality is the only test of any scale. A cheap scale of any kind is worse than useless. It cannot be depended upon at any time. The best is none too good.

The serious trouble with automatic scales has been that they have been built to sell, to meet the views of the cheap man who would take chances. This is true of all other classes of machines. A good scale must not only be accurate, but be built of the best materials—strong, heavy and so built as to last a lifetime. To reach perfection costs money. A good automatic scale, properly built, properly

tested and adjusted, always correct and reliable, lasting forever, is cheap at any price. It will save its cost many times every year. The interest on the investment (\$15 to \$40) counts for nothing against its many advantages and the satisfaction of knowing one is right and has the means at hand of preventing loss and correcting any errors that may occur.

In line houses there is a constant record, or proof of shipments, just to the employe and to the owner, and furnishing at all times the evidence of exact conditions; preventing loss from either dishonesty or carelessness, and laying the facts plainly before the company inspector at every visit, instead of making him wait to empty the house or until the close of the season before discrepancies are discovered.

NASHVILLE GRAIN DEALERS.

The Nashville Grain Dealers' Association held its annual banquet at the Maxwell on January 12, with about 125 members and guests present. J. H. Wilkes acted as toastmaster and captivated all by his facility as master of ceremonies. Byrd Douglas welcomed the guests and Judge W. M. Hart made the response in their behalf. The other responses to toasts were as follows: "The Grain Business as the Banker Views It," F. O. Watts; "Benefits Derived from the National Hay Association," P. E. Goodrich, Winchester, Ind.; "Transportation of Grain," Geo. R. Knox; "River Traffic," Capt. T. M. Gallagher; "Business and Religion," Dr. Lansing Burrows; "Nashville as a Grain Market," W. J. Miller; "The Press," R. L. Burch; "If All the People Were Good," Luke Lea; "Handling Hay at Terminal Markets," W. W. Shaw, Chicago; the program closing with the singing of "America." Musical selections were given at intervals during this program.

Speaking to the subject of "Transportation of Grain," Geo. R. Knox, of the N., C. & St. L. road, among other things, said:

A glance at the map will show at once the very strong position occupied by Nashville as a point for the concentration and distribution of grain, and kindred lines of business—grain products and hay.

As is well known to everyone at all familiar with conditions surrounding this trade, the great cotton section to the South and Southeast depends almost exclusively upon Tennessee, Kentucky and the states north of the Ohio and west of the Mississippi River for their supplies of grain, bread-stuffs, hay, etc.; and with the constantly growing demand for cotton by the world, the increased consumption of grain and foodstuffs of every kind in the cotton section must follow. A further examination of the map discloses a number of facts which add to the strength of Nashville's position. Naturally, at the beginning of the season, the grain produced nearest the consuming section will first be called upon to supply the demand. Thus the Tennessee and Kentucky grain usually moves out before the Northern or Western supply is called upon. With her railroads and river, Nashville is so situated as to easily handle a large share of the Tennessee crop. The same is true of a considerable portion of the Kentucky crop, when the supply of Kentucky and Tennessee grain is exhausted, and the demand begins to draw from the states north and west of us, Nashville occupies a peculiarly strong position.

But, to properly utilize her great natural advantages, and to properly develop this business, Nashville should at once double her elevator and warehouse capacity; and, should this be done, I believe that within less than five years another large increase would become necessary; for, if these elevators and warehouses were kept filled with grain, hay, etc., as they should be, the promptness with which Nashville could supply her Southern customers with the best quality of these articles would, without doubt, rapidly increase the volume of her trade.

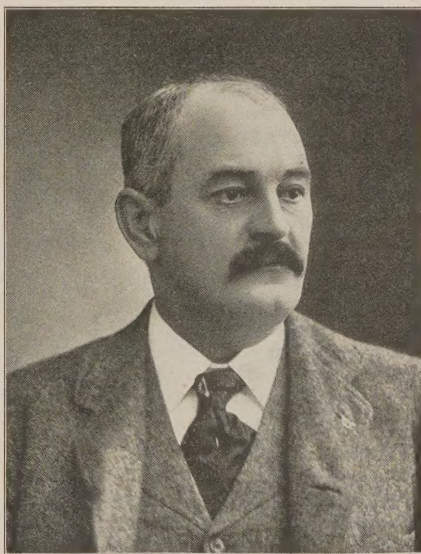
Nashville possesses another very important advantage which should count for much in the development of this business, viz.: her climate. It frequently happens that grain from the far West and Northwest, shipped direct to the South and exposed to the high temperatures prevailing there, damages very quickly by heating, etc. Nashville offers a happy solution of this trouble. By first shipping the Western grain to Nashville, having it stored and properly stirred and aired at this point, by reason of the dryness of our climate, it becomes fully cured, and is then safe for shipment to any

point South, or for export through any of the Southern ports.

While Nashville occupies a very strong position, still, unless her dealers utilize their opportunities, other cities, more enterprising, may take the lead, and, having once secured it, it might prove difficult for Nashville to regain it. As you know, the Nashville railroads have done their share in the matter of ample terminal facilities of every kind; it remains with the grain dealers to do theirs by providing ample elevator and warehouse room for the prompt and proper handling of the vast volume of grain, etc., which may easily be induced to flow through this channel.

EDWARD M. ASHLEY.

There is probably no more progressive or intelligent elevator superintendent in the West than Edward M. Ashley, who is in charge of the South Chicago Elevators C, D and C Annex. His experience in the most progressive market in the world and in typical elevators of that market covers all the years from 1875, when he became engineer for Armour, Dole & Co., Chicago, until this hour. It has been an era of mechanical evolution in the grain elevator under the pressure of the constantly augmenting demand for greater and greater



EDWARD M. ASHLEY, CHICAGO.

capacity, with concurrent speed and economy in cost of handling. In this work of evolutionary expansion Mr. Ashley has always been a leader, instant to adopt new methods and new devices, without waiting until others had led the way, and incidentally his elevators earned also the profits of economical working.

From 1879 to 1887 he managed the Leet & Fritz Elevator; in 1888 he built the Corwith Elevator for Chas. Counselman & Co., in which for the first time the dust was burned under the boilers, having been taken directly from the cleaners to the furnaces. For the same firm in 1889 he built the Englewood Elevator, in which for the first time rope transmission of power was used in a grain elevator. Then followed his work in South Chicago, beginning in 1892, when he built the first grain elevator of any considerable size in that now famous district, which is now known as Elevator D. It was also the first grain elevator to be equipped with a complete system of dust-collecting and -burning appliances. This house was followed by Elevator "C" in 1894 and "C Annex" in 1895, of all of which houses Mr. Ashley has since been superintendent.

Mr. Ashley is a native of Nunda, N. Y., where he was born on November 17, 1848; was educated at the Nunda Literary Institute and Fox Lake Preparatory School of Wisconsin. While still under sixteen years of age he entered the Federal Army during the Civil War, serving in both the 46th Iowa and 45th Wisconsin Volunteer Infantry from April, 1864, to September, 1865. The succeeding years until he went to Armour, Dole &

Co. in 1875 were spent in teaching school in Cresco, Iowa, and Oswego, Ill., and at contracting work in the South, during the interval between school work at Cresco and Oswego, coming North to escape the unfavorable Southern climate.

REDUCED SHORTAGE BY 70 PER CENT.

Junius S. Smith, lake weighmaster, in his annual report to the Buffalo Chamber of Commerce, says that the decrease of about 40,000,000 bushels in grain receipts for the season of 1904 made the work unprofitable, but that the average shortage was not very serious, averaging but a peck per 1,000 bushels.

The receipts of grain and flax seed by lake were as follows:

Wheat	26,270,000 bushels
Corn	27,898,000 bushels
Oats	19,124,000 bushels
Rye	1,736,600 bushels
Barley	15,665,000 bushels
Flax Seed	10,144,400 bushels
Total	100,838,000 bushels

Mr. Smith says: "The original appointment of a weighmaster was made at the urgent request of the vessel interests. A few weeks' trial convinced me that much more than mere tallying was needed in order to accomplish practical results, and as soon as concerted action could be arranged for, the present system of tests and checks was adopted, with the effect of reducing the average shortage fully 70 per cent. Errors will occur, mistakes will happen with the utmost care, but the great change speaks for itself. Some vessel owners and managers have failed to do their part in the matter, but it is hoped that these will see the fairness of turning their work into this channel."

The table showing the amount weighed under the supervision of the lake weighmaster follows:

	Bills of lading.	Short.	Over.	Av. per 1,000 bush.	Equal in Wheat lbs.
Wheat	13,491,354	4,755	3,322	0.10	6
Corn	17,540,790	9,388	4,814	0.26	16
Oats	12,043,890	8,246	3,993	0.35	21
Rye	1,185,177	630	218	0.347	21
Barley	8,412,403	6,259	3,392	0.34	20
Flax Seed ..	5,043,393	1,005	.....	.....	..
Total ..	57,717,097	30,283	15,739	0.25	15

AFTER THE ILLINOIS COMMISSION.

On January 20 Representative McCaskrin of Rock Island, independent republican, introduced in the Illinois legislature a resolution calling for an investigation of the Illinois Railroad and Warehouse Commission. It is said to have emanated from the Manufacturers' and Jobbers' Association of Decatur, the Quincy Freight Bureau and affiliated business men's associations of Springfield, Bloomington, Pontiac, Peoria and East St. Louis.

The preamble to the resolution alleges discrimination in freight rates in Illinois and unlawful rebates known as "freight overcharges" and declares that the Railroad and Warehouse Commission has utterly failed to enforce its ruling of March 11, 1903, ordering a horizontal cut in freight rates of 25 per cent.

The members of the Railroad and Warehouse Commission are Mr. Yates's appointees and are as follows: James S. Neville, Bloomington, president; Arthur L. French, Chapin; Isaac L. Ellwood, De Kalb. The board has been managed by Messrs. Neville and French, Colonel Ellwood having done nothing, and offered his resignation to Mr. Yates several times, it is said, but the latter refused to accept it.

In a pamphlet issued by the Manufacturers' and Jobbers' Association of Decatur some weeks ago, it was virtually charged that Governor Yates refused to allow the Railroad and Warehouse Commission to enforce its rate reduction order that he might raise funds from the railroads to carry on his campaign for renomination. Representative McCaskrin

made his campaign on a platform including the demand for such an investigation as he wishes started. But he has a contest on for his seat and it is for the elections committee to say whether he stays in the legislature to push his resolutions. His contestant is George Cook, a democrat of Rock Island.

DIFFERENTIALS HEARING.

The Commerce Commission hearing on the Eastern trunk lines' differentials to Philadelphia, Baltimore and Newport News, begun some months ago at New York and continued at Philadelphia, was resumed at Washington on January 25, when Baltimore witnesses were heard. They were unanimous that the business of that port would suffer if the differentials were removed, and that all the through traffic in grain and flour for export would go to New York. Robert Ramsey, representative of the Johnson line of steamers, was the first witness, who made, as the Baltimoreans think, a convincing witness. On cross-examination by C. S. Hamlin, representing the Baltimore Chamber of Commerce, he said that his line would not be satisfied with equal freight rates for all ports; that there should be a smaller through rate via Baltimore than via other ports, regardless of what the ocean rates might be from the various ports. In other words, they would not make their ocean charges from Baltimore as much higher than those from Boston as the inland differential, which they seek to maintain, is larger. They think there should be a fractional advantage in favor of the shippers who take the Baltimore route from St. Paul or Chicago to Europe.

It was argued by the Boston interests that Mr. Ramsey's statement amounted to "an advance" upon the port's former argument, which was for inland differential, in order to make a uniform through rate. Boston asserts that this was Baltimore's contention upon which the original Thurman award of 1882 was based, and also that of the review of the Thurman award in 1898 by the Commission. But Mr. Ramsey testified that the trial of equal through rates has resulted in "no tonnage" for Baltimore, and that it is necessary to have the full 3-cent differential on all commodities. One of the points made by Mr. Ramsey was that it takes six ships to maintain a service from that city to Liverpool, which five can maintain from New York or Boston. When on cross-examination his attention was called to other shipmasters who think differently, his reply was that he did not care what other people think, that he knows his own business and knows that he could get along with five of his ships if plying from one of the northern ports. When asked if he could name any line that was doing this, he said he thought he could do it himself. The Boston people assert that with five steamers they have ample time in that port to provide for every contingency, and that they could make the same number of runs from Baltimore.

Mr. Ramsey of course admitted that grain merchants of New York have to meet the price of Montreal competition on one side and that of the Gulf on the other, and that these phases of the competition were already so affecting Baltimore that only a few days before this hearing New York had asked Baltimore to join in an appeal to take this subject before the Commission. The free canals of Canada, and other efforts of that government to facilitate grain transportation, helped the Montreal route in the summer, while there are climatic advantages for the Gulf ports in the winter.

J. W. Snyder of Baltimore, a grain exporter, complained of lack of business under the 1½-cent differential on grain, and said that in former years the Baltimore railroads protected that port in making rates which would get the business.

John L. Dennis testified that in his opinion Baltimore's shipping interests would go down if the 1½-cent differential rate now allowed were taken off. He admitted that it was not because of higher ocean rates, but from many other causes obvious to even the casual observer.

Charles England urged that Baltimore should have a 3-cent differential as much now as in years past. The long, roundabout ocean haul down the Chesapeake made this necessary, and always would. He argued that since the differential rate had been cut, there had been a sharp falling off of business in differential territory. When the differential was as high as 5 to 8 cents, he said the New York merchants established branch houses in Baltimore and added much to the business of the port. They left when the rate was cut to 3 cents.

Blanchard Randall asked that the differential be put back to 3 cents to even up the distance disadvantages of the city. Since the spring of 1902, the grain trade of Baltimore had been far from prosperous and had fallen off seriously. Before that, while railroad tariffs fluctuated, the through rates to foreign ports were about the same, owing to like fluctuations in ocean rates. If there were to be equal through rates, Baltimore was, in his opinion, doomed to the loss of her grain traffic.

"You say," said Chairman Knapp, "that the export grain rate to Baltimore should be 3 cents per 100 pounds less than New York. The ocean rates from Baltimore are not 3 cents more."

"You are correct," answered the witness.

"Then," added Mr. Knapp, "you hold that the through rate to the foreign destination must be less via Baltimore than New York."

"Yes," was the answer. "Baltimore and Newport News have certain disadvantages which require certain advantages in rates to compete with business from other ports."

Underlying the arguments for Baltimore there was a general feeling that New York with equal rates would get nearly all the grain traffic, owing to the frequency of sailing dates, the greater number of vessels going there, and the convenience and competition in the making up of cargoes. These considerations taken with the circuitous water approach to Baltimore would serve to take the latter city out of the grain business. The only way, according to most of the witnesses, for Baltimore to keep her business, would be to insist on lower ocean rates or lower railway rates because of the greater cost and the disadvantages of the longer sea haul.

C. S. Wright, freight traffic manager of the B. & O. R. R., testified at great length. In substance he said that in his rate-making he considered distance first. Distance, he said, is the controlling element in making rates in trunk line and Central Freight Association territory. Baltimore, on the basis of distance, is behind in its differential from 12 to 10 cents, according to the commodity. Baltimore is treated badly in the matter of differentials on goods from Chicago to East St. Louis, but from Indianapolis and other points in Central Freight Association territory the situation is far worse. He said he knew of no discrimination as glaring in railroad rates as now exists in connection with the Middle West and the port of Baltimore; that because of insufficient differentials, efforts he had made for years to get higher class freights to Baltimore have been unsuccessful. He said if the inland rates were fixed with the proper differential, the ocean rates would adjust themselves, but that the steamship lines could not adjust themselves if inland rates were made equal to all ports.

E. G. Preston, secretary of the Boston Chamber of Commerce, said that the differentials to Baltimore and Philadelphia worked so that the steamships coming to Boston with cargoes were forced to go to Philadelphia for eastbound foreign cargoes. He claimed that this was largely due to the fact of the 2-cent differential to Baltimore and 3-cent differential to Philadelphia. He contended that these differentials would eliminate the profit on through shipments, especially on grain and flour.

The Commission fixed March 14 as the date for arguments of counsel in the case, and adjourned the hearing.

Central Illinois is said to be suffering from a plague of rats on the farms, whose levies on corn in cribs have been quite serious.

ARKANSAS VALLEY HAY AND GRAIN DEALERS.

The Arkansas Valley Hay and Grain Dealers' Association, an organization embracing all the principal hay and grain dealers in the Arkansas Valley, from Pueblo to the Colorado state line, held a midwinter meeting at Manzanola, Colo., on January 26.

On this occasion there was a short executive business meeting, after which the members present were entertained by H. B. Dye, treasurer of the Association. Lunch was served at the Collier House and then there was a ten-mile drive in the neighborhood, followed at 6 o'clock p. m. by a smoker at the town hall and a banquet at the K. P. Hall, given by the citizens of Manzanola. The menu was quite elaborate and was unique for the fact that every item on the bill, from the soup to the wines and cigars, was a product of Manzanola.

The following-named gentlemen were guests of Manzanola on this occasion: Chas. Stubbs and Ray Clark, of the Beaty-Stubbs Trading Co., Fowler; B. M. Spalding, of the La Junta Milling and Elevator Co., La Junta; Chas. Maxwell, of the Lamar Milling and Elevator Co.; G. J. Saylor, of the Lamar Seed Co.; Cora Strain, of Strain Bros., Lamar; E. C. Leak, of the Rocky Ford Mill and Elevator Co., Rocky Ford; J. N. Beaty and H. B. Dye, of the Beaty Mercantile Co., Manzanola; A. B. Corbin, mayor of La Junta; S. N. Mitchell, Trinidad; W. B. Cornell, Albuquerque, N. M.; R. F. Herndon and C. H. Green, Ordway.

ATTACK ON ERIE CANAL PLANS.

A vigorous campaign is on in New York, both at Albany and throughout the state, to repeal or otherwise defeat the \$101,000,000 expenditure to enlarge the New York canals to the 1,000-ton barge size, as voted by the people of the state some three years ago. John I. Platt of Poughkeepsie is the visible Albany end of the junta, while the farmers of the state are kept in line by the Country Gentleman and American Agriculturist newspapers, which have hitherto consistently fought the measure at all its stages, both because the farmers would be required to pay a [small] fraction of the cost and because the completed canal would be likely to render New York and New England farmers' competition with the Western more onerous. There is also an Anti-canal League, organized at the Transportation Club in New York City, which the New York Times sarcastically dubs "an oath-bound organization of men banded together by an inextinguishable hatred of the New York Central and New York, New Haven & Hartford railroads."

The League has employed ex-Secretary Elihu Root to lead the legal battle against the canal and the voted issue of \$101,000,000 of bonds for the work. He will be assisted by Charles S. Andrews of Syracuse, ex-chief justice of the Court of Appeals. It is said that Judge Andrews has prepared an exhaustive opinion, in which he assails the constitutionality of the law, and that proceedings will be brought before Attorney-General Mayer to induce him to make up a case that may be submitted to the Court of Appeals. Friends of the canal think it is not likely the act can be assailed successfully, but the throwing of the question into the courts will cause the postponement of the award of contracts and the loss of much valuable time.

Bids have already been asked for and submitted; and in his message to the legislature Governor Higgins said: "The bids on six test contracts for parts of the work on the 1,000-ton barge canal seem to warrant the belief that entire construction can be completed within the engineers' estimates of the probable total cost of the work. It is gratifying to note that this great expenditure, ordered by an overwhelming popular vote, will probably prove adequate, so far as concerns that portion of the entire cost set apart in the estimates for construction, and it is to be hoped that the estimates of damages for taking of property will prove to be equally accurate."

Pending legal proceedings upon the lawfulness of the expenditure in the Court of Appeals, the Anti-canal League, should an attempt be made to go ahead with work under the law, either in paying warrants or signing contracts, will at once make application to the courts for injunctions.

On the other hand, the New York Canal Association is preparing to meet the opponents of the improvement, and will rally the canal advocates in the legislature to oppose the approaching attack. Even so warm a supporter of the canal project as Gessler H. Schwab, however, admits that the improvement will be delayed until the Supreme Court passes upon the constitutionality of the act; and it may be years before the case reaches the highest court.

ED. McCUE.

The buildings of Ed. McCue at Pittsburg, Ohio, have been erected to meet the necessities of a business that includes the handling of flour, feed, coal, etc., as well as grain purchased directly from the farmers of Darke County. The main building is 48x36 feet in size, with an addition of the same dimensions.

The grain storage capacity is 20,000 bushels, the elevator being provided with both corn and wheat



ELEVATOR AND WAREHOUSE OF ED. McCUE, PITTSBURG, OHIO.

dumps, and among the machinery will be found a Barnard & Leas No. 3 Corn Sheller and a Corn-wall Corn Cleaner.

Mr. McCue has been in business at Pittsburg since 1889, and enjoys the confidence of the community in the highest degree.

NORTH DAKOTA FARMERS' ELEVATORS.

In connection with the grain growers' convention, or institute, at Fargo, N. D., a meeting of representatives of farmers' elevator companies was held on January 19 and 20, the meeting being promoted by O. G. Major and J. S. MacDonald of the Minnesota Farmers' Exchange to secure members and stock takers in North Dakota.

Mr. Major said there are fifty successful farmers' elevators in North Dakota, which, he urged, should be members of the Minnesota Exchange.

Mr. MacDonald talked generalities about farmers' co-operation, banks in Germany, butter and eggs in Denmark, creameries and telephones in Michigan, Wisconsin, Kansas and Minnesota, etc. Exchange members, he said, got better prices for their stuff and got the benefit of the screenings.

There was much speaking at the first, or evening, session, and next morning, with thirty-eight elevators represented, twelve of whom had authority to act, the North Dakota Farmers' Elevator Association was organized with O. G. Major as president and C. S. Shippey of Hope, secretary. Then 1,200 shares of the Minnesota Farmers' Exchange were subscribed for.

John Billups of La Crosse, Whitman County, is a candidate for the position of state grain inspector of Washington.

THE HAY CLASSIFICATION.

It was a fortunate coincidence that the delegation from the National Hay Association to call upon President Roosevelt to thank him for his utterances upon the railway rate reform question, should have taken place almost on the day the U. S. Circuit Court at Cleveland declared, in rendering its decision in the famous "hay classification case," that the Interstate Commerce Commission had no power to alter classifications or rates.

The delegation, appointed by President Morgan of the National Hay Association, consisted of J. W. Sale, Bluffton, Ind.; J. L. Dexter, Detroit, Mich.; P. E. Goodrich, Winchester, Ind.; H. S. Grimes, Portsmouth, Ohio; H. G. Robinson, Green Spring, Ohio; A. E. Reynolds, Crawfordsville, Ind.; Charles England, Baltimore; George C. Warren, Saginaw, Mich., and President H. G. Morgan, Pittsburg—an exceedingly able body of gentlemen, by the way, and distinctly representative of the vast hay interests of the country.

Mr. Charles England of Baltimore was spokesman of the delegation, who, after congratulating all citizens that they are still able to appeal direct to the chief executive of their government (this address was made on Monday, January 23, when all the world was still quivering with the horrors

tention made by its counsel, declaring that the advance of hay to fifth class was a discrimination against producers, dealers and consumers of hay in the territory named.

In accordance therewith an order was issued that on or before December 1, 1902, the defendant carriers should desist from charging fifth-class rates on hay. This order was ignored by the carriers, and the Interstate Commerce Commission sought to make its decree effective by instituting proceedings in the United States Circuit Court at Cleveland, Ohio. This case was heard in May, 1903, and is still pending.

Thus, for five years, have the railroads persisted in charging unfair and discriminative rates on hay, in defiance of the decree of a fair and impartial tribunal, after a fair trial. A reference to the record of this case will show the injustice of the carriers' position, also the spirit in which they regard any attempt to resist oppression on their part.

It is claimed by the carriers that the correcting of rates by any tribunal will put the government in the attitude of dispensing prosperity in some localities and withholding it from others; but this proposition is misleading, because the community-of-interest plan has destroyed the independence of railroads, which if free to act for themselves would insure to localities that degree of prosperity to which each is naturally entitled; and so long as present conditions exist, the construction of new and independent lines cannot be expected, and railroads to-day hold the power to regulate interstate commerce, notwithstanding that such power is alone granted Congress by the constitution. Appeals or protests against discriminations, no matter how reasonable or well founded, are treated contemptuously and railroads seem to regard all business men, organizations or commissions as their enemies unless they can control them; and with this feeling becoming general the demand for some restraining power must receive due regard because of its importance. We recognize that the making of rates is a delicate matter; but if any given rate be found to be wrong, it is useless to say that a different rate is right unless there is power to compel the adoption of the equitable rate.

The general concern shown by the Chief Executive in the business affairs of this country, apart from any political interest, has everywhere given hope of relief from the baneful conditions which have become most oppressive, and if continued threaten to affect the foundation of all legitimate business. Transportation influences every condition and is the most important subject of American life to-day. There are more interested in reasonable and equitable rates than the man who actually pays the freight, and cost of transportation affects not only what we eat and wear, but all other material things.

The transportation tax last year amounted to \$23.31 per capita for every man, woman and child, or \$116.55 for every family of five persons; and as people reach a proper understanding of these matters they become restive under the power that is relentlessly applied.

The positive position of you, Sir, is everywhere appreciated. The National Hay Association and all commercial interests in whatever lines urge a firm maintenance of that position. A large percentage of the thinkers, irrespective of party affiliation, are in accord with the sentiments expressed upon this subject in your message to Congress, and, furthermore, stand for an insistence of the performance of the action therein outlined. These recommendations are conservative and should be accepted rather than risk drastic measures which may be forced upon us by the united action of the people at the polls.

Mr. President, there is no desire to harass railroads or to impair one dollar of the capital invested in those properties; but there are other interests to be regarded, and there is nothing that has greater tendency to shake the faith in our institutions and our government than the prevalent belief, either from personal knowledge or the press, that the great corporations have such influence upon legislation as to make them immune from the reasonable demands of a long-suffering people.

The interview with the President lasted about half an hour, and at the conclusion of Mr. England's address, his Excellency stated the position of the administration to be a "fair deal for all" and no retiring from that position.

THE HAY CASE DECISION.

On January 27 Judge Wing, of the U. S. Circuit Court, at Cleveland, before whom was heard the action of the Interstate Commerce Commission to compel the railways to comply with its order to restore hay to the sixth class, handed down a decision in the case, which amounts, stripped of all verbiage, to this: "I find," said the Court, "that the Commission's order, as an entirety, is beyond the power of the Commission to make, and, there-

fore, it is not a lawful order, and is not one which this court is empowered by the statutes to enforce."

As to the matter of classification itself, Judge Wing said: "The action of the railroads in establishing the freight classification was purely voluntary on their part and was not required of them by law. The public classifications were merely the means that the railroads employed to comply with the Interstate Commerce Commission's rule relative to publishing freight classifications. It is undeniable that the Commission has not the lawful right to fix freight rates on railroads. That is admitted."

After the appearance of this decision the attention of the President was called to it by President Morgan of the National Hay Association, who, having quoted the vital paragraph of the decision as given above, added the following:

You will observe that the decision is based upon the inadequacy of the jurisdiction of the Interstate Commerce Commission to order any change in classification, however unreasonable, unjust or discriminative such classification may be.

As this is a judicial interpretation, it is probably entitled to great weight, and has stimulated the producers, dealers, shippers and consumers of hay, and should stimulate all commercial interests irrespective of the kind with the hope to secure that legislation which will produce a "square deal" between the transportation agencies and those who are compelled to use them.

WANTS TO REORGANIZE AGAIN.

The annual (or is it semi-annual?) movement to "reorganize" that perennially moribund institution at present known as the Kansas Farmers' Cooperative Shipping Association, has had a tentative beginning. Fathered originally by Jas. Butler, professional politician and agitator, this aggregation has had a various career both during and since the Butler regime. A year or two ago Butler was ousted and the organization captured by C. B. Hoffman of Enterprise, owner of a big mill and a line of elevators outside this particular aggregation of co-operatives, and an interest in a Kansas City commission house. Mr. Hoffman is a successful business man on his own account, but he does not seem to have injected much go into the co-operative outfit, the farmers, as he complained some months ago in a circular letter, having a habit of "nearness" in money matters that was most unpatriotic and inconvenient.

Apparently "things have been getting no better quite rapidly," and recently Mr. Hoffman issued invitations to representatives of the various flour millers' clubs in Kansas to go to Kansas City and talk over the project of taking stock in his co-operative puzzle. That meeting was held on January 20 at the Midland Hotel.

There were about thirty millers present and two sessions were held behind closed doors. The bait Mr. Hoffman held out was "the prospect of buying grain direct from the farmers, thus eliminating the middleman's profit and dealing a severe blow to the Kansas Grain Dealers' Association."

Some of the delegates seemed disposed to nibble tentatively, but no definite bargain was struck. George H. Hunter of Wellington, president of the Southern Kansas Millers' Club, and F. L. Williamson of Clay Center, president of the Northern Kansas Millers' Club, were, however, authorized to appoint committees from their respective clubs to canvass their members regarding the proposition. As soon as they finish their work another meeting will be held.

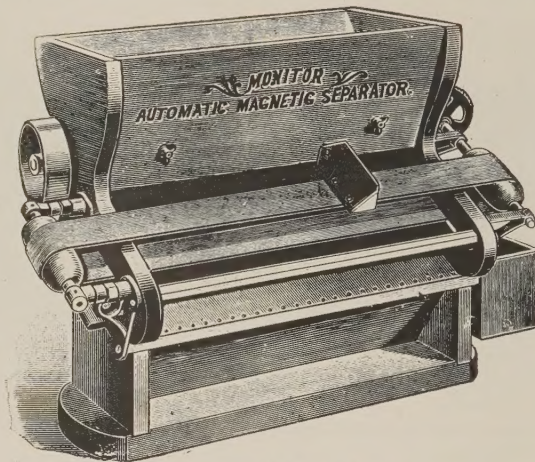
Commenting on the affair, J. E. Howard of Wichita, a member of the Southern Kansas Millers' Club and an experienced association worker and mill owner, said: "Such a movement has been known to the Wichita millers for some time. I do not see anything in it for the millers, and I guess the other millers of the city look on the scheme very much as I do. At least, none of them was at the meeting, so far as I know. It is a fact that the millers have maintained a friendly attitude toward the grain dealers' state association and toward the farmers' association as well, for

the very good reason that it has been good business policy to do so. I see no good reason to make a change now. I cannot see how the millers and grain dealers can amalgamate, for the reason that their interests are opposed to each other. On the one hand, the grain dealer, whether he be a member of some farmers' association or of the grain dealers' association, wants all he can get for his grain, while on the other hand, it is to the interest of the miller to get his grain as cheap as he can. I am in favor of continuing to maintain friendly relations with both associations, rather than enter into any arrangement that would seem to array the millers against either side."

MONITOR MAGNETIC SEPARATOR.

We show in the cut herewith a Monitor Magnetic Separator, a machine that is meeting with remarkable success among the trade because of its high efficiency in extracting nails, iron ore, bits of iron, wire and metallic particles from grain without in any way impeding its flow. The fact that it is absolutely automatic and requires no attention or care other than an occasional oiling especially recommends it to the trade.

The machine is very strongly built, and being



MONITOR AUTOMATIC MAGNETIC SEPARATOR.

free from jarring, will wear indefinitely. Its first cost is its only cost, because it has no delicate mechanism to wear out and nothing that can break under the most severe usage. The magnets upon which the machine's efficiency depends are specially manufactured, and are tested to meet more than any possible requirements of actual service. The machine, coming in thirteen different sizes, with capacities ranging from 35 to 600 bushels per hour, ought to have a place in plants of every size. Those of the trade who have not acquainted themselves with this machine would do well to write the manufacturers, the Huntley Manufacturing Company of Silver Creek, N. Y.

New Orleans beat all her records for grain shipments in January last, when 5,203,536.04 bushels of corn were exported, an increase over January, 1903, of 4,652,042.30 bushels. There were 57 cargoes, of which 35 went to ports of Continental Europe.

The Hall-Baker Grain Company of Kansas City has excited the envy of grain dealers over the ease and facility with which it appears to adapt its transactions to the variations in rail and ocean freights. The reason for the envy comes from the fact that the company has apparently been able to transact its business in advance of a new tariff instead of waiting like more ordinary grain merchants to begin business after the tariff has been made public. If the beliefs of local dealers are correct the Kansas City concern was the first to avail itself of the "midnight tariff" issued several weeks ago by the Missouri Pacific, which was responsible for the present stirring up of freight matters in general.—Record-Herald, January 28.

NATIONAL BOARD OF TRADE.

The thirty-fifth annual meeting of the National Board of Trade, held at Washington on January 17, 18 and 19, was remarkable for nothing save the inordinate length of the program (80 items) and the infinitesimal time that could be devoted to the separate items of the list. The sessions were presided over by President J. J. Sullivan of Cleveland and Chas. S. Hamlin of the Boston Chamber of Commerce. A number of delegations were absent, as from Chicago, Toledo, St. Louis, etc., but the New Orleans Board of Trade was represented for the first time.

The transportation question naturally received a larger proportion of the Board's time than perhaps any one other item on the program. The Board straddled, the East getting an indorsement of the ship-subsidy grab and the West a resolution favoring railway reform along the lines of the Cooper-Quarles bill with a rider permitting pooling "under supervision and control."

But the faddists were largely in evidence. Pittsburgh was conspicuous as a "flying wedge" doing rush work on college football tactics in favor of "penny postage." Cleveland's Chamber of Commerce delegation also waved the penny postage streamer and came loaded with a resolution on

the postage laws. In fact, the resolutions were interminable—on the American merchant marine, amendments to the interstate commerce law, uniform bill of lading, proposed parcels post, the importance of improving certain rivers and other inland waterways, international arbitration, Anglo-American arbitration treaty movement, proposed arbitration between Russia and Japan, trade relations with Canada, reciprocity, reform in the consular service, free alcohol for industrial uses, regulation for wood alcohol, the Lovering bill, forestry and irrigation, national currency laws, uniform metric, money and weight system, national trademark law, reduction of tariff on goods imported from the Philippine Islands, presidential term of office, prohibiting the use of the American flag for advertising or trade purposes, national experimental cold storage plant, government control of interstate insurance and so on ad lib.

The banquet at the New Willard was, of course, the event par excellence of the meeting. Speaker Cannon talked: said Congress would spend at this session \$650,000,000; must have a navy and an army; other things will have to wait, including tariff reform—"we need the money." As to railway legislation he said: "There is talk of an interstate commerce law. It seems to me that this is brought about largely by competition between the great commercial centers. There is already much legislation on the statute books intended to remove any inequities that may exist, but in the next five weeks proper legislation may be enacted that will tend to remedy any inequities that may exist between the producer, distributor and consumer."

Representative Burton of Ohio also spoke. Among other things he said (as a "jolly"?): "The merchant who brings his products from abroad is

greater than the soldier who goes out to fight." [And then followed a mysterious graveyard commotion in Maine—the body of the late Mr. Dingley had turned over.] Speaking of the rate question, he said: "Give me the right to determine freight rates, and I can make or mar any city in the United States. Discrimination means inequality of opportunity." Then he turned to international arbitration: "As the Chamber of Commerce of France compelled the government to make a treaty with England, so I trust that your efforts will be used in the direction of international peace; for one who advocates peace is in line with the assured progress of the future."

Corporation Commissioner Garfield was also on the toastmaster's list. In explanation of his recent report and its recommendations, opposed by the administration, he said: "We are not trying to impose unreasonable restrictions, but to work for the development of commerce along right lines, and we must have your help. We are trying to bring capital and labor together on common ground. We are trying to close up the chasm so that each will see the other's point of view. We are trying to find out what is right and not what is expedient. We are trying to show the obligations each has to the other. We are trying to get the facts, for only ignorance brings violence and wrong."

RAILWAY RATE REFORM QUESTION.

The debate on the question of railway reform was precipitated by William M. Coates of Philadelphia, from the committee on amendments to the interstate commerce law, who submitted a majority report of that body setting forth that—

The National Board of Trade is opposed to unjust discriminations by railroads in any form and that the Interstate Commerce Commission performs a useful function as an investigating and prosecuting medium; but it should not be invested in any degree with the legislative, judicial and business functions of rate-making; that to empower it to declare what is reasonable in a disputed rate and make that rate operative until reviewed by the courts, as proposed in the pending Cooper-Quarles bills, is inexpedient; that if existing courts are not sufficient to give speedy decisions upon interstate commerce questions, additional courts should be provided.

Further, That the National Board of Trade earnestly advocates legislation by Congress to amend the interstate commerce law so as to permit reasonable traffic agreements by railroads under the supervision and control of the Interstate Commerce Commission, to the end that unjust discrimination may be prevented and reasonable, uniform and stable rates be established; and

That the act to regulate interstate commerce be amended, to wit: That private car lines and terminal railroads engaged in interstate commerce be considered as common carriers and subject to the interstate commerce act.

Jas. T. McHugh of the Cincinnati Chamber of Commerce attacked the report, opposing any permit to "pool." "Pooling," he said, "would mean that the railroads would divide their territory and wipe out competition."

Mr. Coates quoted the law, and stated that such agreements as were proposed were necessary for the proper conduct of the vast freight traffic of this country.

Another delegate, in favoring the resolution, said if the railroad interests of this country were not given the right to legalize traffic agreements between the several roads these railroad companies may form a community of interest plan which will make conditions far worse for the public.

James F. Parker of the New York Produce Exchange favored the resolution proposing the legalizing of reasonable traffic agreements by railroads. He believed the public engaged in bringing products from one point to another would be greatly benefited by the adoption of a law such as has been proposed.

Mr. McHugh submitted a minority report from the same committee, which resolved that—

The National Board of Trade encourages the passage of an amendment to the interstate commerce law which will invest the Interstate Commerce Commission with authority to determine what changes shall be made in the rates, regulations or practice found, upon full hearing, to be discriminative as between localities or different

descriptions of traffic, or unreasonable in themselves, such determination to be immediately operative and so continue until overruled by the courts; that in view of the great development of public sentiment in favor of this legislation it is the sense of the National Board of Trade that action should be taken without further delay, and the National Board of Trade desires to impress upon Congress the urgent necessity of amending the act during the present session of the Fifty-eighth Congress.

"The Interstate Commerce Commission," said Mr. McHugh, "is not a policeman nor a packed jury. It is made up of honorable men. The transportation companies make their rates. It is the duty of the Interstate Commerce Commission to come in where unjust discrimination is complained of. Then it must sit in judgment and decide what is a just and equitable rate."

Mr. C. Stuart Patterson of the Philadelphia Board of Trade said cheap rates were not good rates. Freight rates should be ample to enable the railroad companies to make the necessary improvements on their lines and give the public good service. He did not believe it was good policy to invest in the hands of "five gentlemen here in Washington" (meaning the Interstate Commerce Commission) the great power of the railroads which may build up or depress one section of the country or another; one city or another city."

The representative of the New York Board of Trade and Transportation favored the majority report; but Mr. Kline of the Philadelphia Trades League supported the minority report. He said: "We business men want regulations by which we may go to an impartial jury. The merchants and shippers of this country should first express themselves in harmony with the man who received the greatest majority in the history of this country and who stands for the best interests of our common land." This was greeted with hearty applause.

The New Orleans Board of Trade's delegate supported the minority report.

H. T. Newcomb, of the Washington, D. C., Board of Trade, a lawyer, favored the majority report. He said:

The power to regulate commerce is complete and is limited only by the requirement that property shall not be taken without due process of law. But when such power is exercised it should be exercised wisely and after thorough investigation. In eighteen years the Interstate Commerce Commission has decided only 353 cases, and only 194 in favor of the complainant. Seventy per cent of the orders directing changes in rates have been voluntarily obeyed by the railroads. Most of the other cases have gone to the courts, and in only two of the contested cases has the action of the commission been sustained. No one in this body would favor giving general rate-making powers to the Interstate Commerce Commission, but this is what would be done by the Quarles-Cooper bill and by every measure now pending in Congress or under public discussion. Anyone may be a complainant before the Commission, and the Supreme Court has decided that no complaint can be dismissed on account of absence of direct damage to the complainant. The complaint may be as broad as the United States and may involve all the railroads in the country. It is now generally understood that the Interstate Commerce Commission seeks and the Quarles-Cooper bill proposes to confer the power to raise rates upon the Commission. The commissioners have repeatedly asked for this power, and it is perfectly clear that in the great majority of cases the only reasonable action it could take would be to order advances.

After a long debate, in which New York almost to a man opposed any grant of power to the Commerce Commission, the Board, as an expression of its views on the transportation question, adopted the following resolution:

The National Board of Trade, believing that the interests of the people demand not only that rates of transportation should be reasonable and there should be no unjust discriminations or preferences, but also that there should be a more effective governmental supervision of all transportation agencies, expresses the earnest hope that Congress, in its wisdom and as speedily as possible, will enact such legislation as will, with justice to all interests concerned, secure a more speedy and more effectual correction of any abuses in transportation methods or operations which may upon due inquiry be found to exist, and to that end that power be given to the Interstate Commerce Commission to revise any rates found to be unreason-

able or discriminating, the revised rates not to go into effect until the action of the Commission shall have been, upon review, confirmed by the Circuit Court of the United States of competent jurisdiction.

Resolved, That the National Board of Trade earnestly advocates legislation by Congress to amend the interstate commerce law so as to permit reasonable traffic agreements by railroads under the supervision and control of the Interstate Commerce Commission, to the end that unjust discrimination may be prevented, and reasonable, uniform and stable rates be established.

Resolved, That the act to regulate interstate commerce be amended, to wit: That private car lines and terminal or originating railroads engaged in interstate commerce be considered as common carriers and subject to the interstate commerce act.

Subsequently resolutions were adopted favoring the uniform bill of lading, commending the work of the Marine Commission and endorsing the New Orleans proposition favoring the establishment of a steamship company, with a capital of \$5,000,000, to ply its steamers between New Orleans and Panama.

Among other propositions approved were the following: International arbitration and ratification of the pending treaties; irrigation and forestry laws, etc.

Officers were re-elected as follows: President, J. J. Sullivan, of the Cleveland (Ohio) Chamber of Commerce; first vice-president, Charles S. Hamlin, of the Boston Chamber of Commerce; second vice-president, George H. D. Johnson of Milwaukee; secretary and treasurer, W. R. Tucker, of the Philadelphia Board of Trade.

The report of the committee on membership was adopted. It provides for the establishment of an associate membership of the National Board of Trade, so as to extend the influence and power of the organization and strengthen its financial resources. The fee for associate membership was fixed at not exceeding \$20. The fee for active membership was placed on a sliding scale from \$20 upward, according to the number of members in the constituent body represented by the candidate for membership.

THE BEAN CROP.

Beans are grown on a commercial scale only in the three states of New York, Michigan and California. There have been no official or commercial estimates made of the bean production of New York since the census of 1899. According to the Michigan report the bean crop of that state amounted to 2,955,810 bushels in 1902, the latest estimate available. There is no official estimate of the bean crop of California. An official computation puts the 1904 crop of lima beans, which constitutes the most important part of the California crop, at about 450,000 sacks. The following statement of the shipments of beans from that state by rail or sea has been published by the Country Gentleman:

Fiscal year.	Pounds.
1900-01	33,063,150
1901-02	73,248,500
1902-03	89,322,000
1903-04	109,757,600



A Starter.—Pittsburg Gazette.

HEROIC TREATMENT AT PHILADELPHIA.

Acting on a charge of apparent unfairness in methods, the grain committee of the Philadelphia Commercial Exchange early in January gave notice to the Keystone Elevator and Warehouse Company that if the said company continued in its refusal to become a member of the Exchange a resolution to prohibit the inspection of grain at that elevator would be passed. No attention being paid to this notice, the said resolution was passed, and ten days thereafter, on January 18, the resolution went into effect and the inspectors were withdrawn from the elevator.

The reasons for this summary action are somewhat vague at this distance. The Keystone Company had been repeatedly asked to join the Exchange, but had not done so, nor given reasons why it did not do so. A certain corn broker who twice had tried to engineer a "squeeze" of the market in that commodity, thinks he could find a reason, since on both occasions, when his squeeze was right and in apparently good working order, the Keystone Company (not regular) would unload its unlisted and, therefore, indefinite supplies into a regular house and unmercifully squeeze the squeezer.

It was also hinted that the Keystone Company was allowed a rebate on all shipments by the Pennsylvania Railroad Company; in fact, that it was controlled by the railroad company, to the detriment of competitive grain merchants, who were refused a rebate. Some of the members declared that the Pennsylvania Railroad carried grain consigned to the Keystone Company from one siding to another without charge, thus allowing its officers to underbid competitors on all sales, and thereby capture a large share of business.

It was also claimed that as L. F. Miller & Son handle about 98 per cent of the stuff going through the Keystone house they might be in position to manipulate domestic and export rates to give them an advantage in the domestic trade; and other dealers said they could not see why the grain intended for export and billed at the special export rate should not go straight through to the export elevator without paying tribute to a local terminal. No one charges that the grain so billed has been diverted, in any considerable quantity at least, to local uses, but some of the merchants say the privilege presents possibilities of grave abuse. The crux of the whole contention against the elevator company is that the Pennsylvania Railroad should not permit an important local terminal to be operated by a company virtually controlled by a firm in active competition with other shippers over the road.

H. C. Miller, of the firm of L. F. Miller & Son (members of the Exchange), who is president of the Keystone Company, denies that the company has any preference or advantage from the Pennsylvania R. R. Co. of any sort, and has protested against the grain committee's action, since the Elevator Company "is quite willing to comply with any reasonable conditions desired by the Exchange."

As the rules of the Exchange provide that grain shall be inspected only at "regular" elevators, the committee would seem to be within its rights in withdrawing the Keystone's inspection, the house not being on the "regular" list; and all grain after January 18 was inspected on track only before binning. The Keystone elevator has 600,000 bushels' capacity and is located at Park Avenue and Clearfield Street.

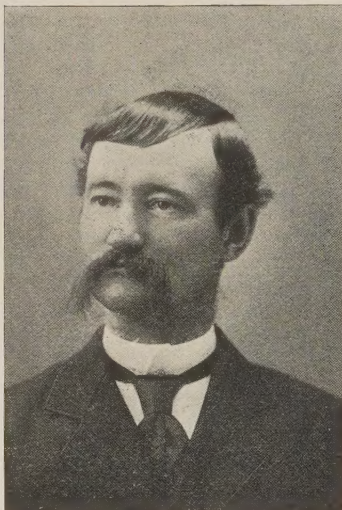
The Nebraska farmers' elevators think there is a chance for making corn shipments to California. Secretary Smith of Kearney told of a neighboring grain man who, when feeling in poor health, went to California. "In a short time orders rolled in until his elevator at Grand Island had to have an extra switch engine to handle the business. In one train alone there were 28 cars of corn. It is all right and easy to find a market for the small

grains," said he, "but the entire Pacific Coast is to be developed as a market for corn. All they want to know there is that we have the goods. All we want to know is that we are dealing with responsible people. At present, without the traveling agent we need, it takes time to look up the liability of the people we deal with out there and lost time means lost business. It is comparatively slow."

ELLIOTT F. SHEPARD.

The east line of Cuyahoga County has been indented into Geauga, apparently to let Chagrin Falls claim kinship politically with Cleveland, or perhaps it was to keep Elliott F. Shepard in a county "of his size." At any rate Mr. Shepard is of the metropolitan type of merchant. Born in Solon, Cuyahoga County, in 1851, he began life as a day laborer, studying, however, during his leisure, until he had mastered the dairy business, from which he went into contracting, and then, naturally enough, into lumber. Since then he has added grain, flour and feed, salt, hay and straw, and coal.

When he went into the feed line his business amounted to from \$10 to \$30 a day, deliveries be-



ELLIOTT F. SHEPARD.

ing made on a hand truck, with a barrel. Now the business amounts to \$100,000 a year, or from \$200 to \$600 a day, with credits often of \$300 a day. The elevator has a 25-h. p. Howe Gasoline Engine, elevator leg with 6x12-in. cups, and 145 feet of 12-in. screw conveyor for elevating and distributing feed to the bins and loading spouts. There is storage capacity for from 40 to 60 cars on his premises, and work is found for a regular force of four to six men in the elevator.

Mr. Shepard is entirely self-made in a business way, and began with no opportunities other than natural ability and gifts which he was obliged to cultivate in the intervals of earning a living and getting a start. But his business is now a very large one and he is rapidly accumulating a fortune, all legitimately earned and acquired.

A COB-MEAL MILL.

Few millers have ever been permitted to see the inside of a cob-meal mill. The process has been kept comparatively secret. At a meeting not long since, some millers professed entire ignorance of such a thing as a cob-grinding establishment, while others apparently imagined that cob meal was the same as crushed corn and cob meal. The latter is well known and approved commercially and scientifically; but cob meal is another proposition.

The process in an Indiana cob-meal mill is given in an insurance paper. While the writer describes it from the standpoint of an insurance risk, the miller can get an idea of the milling side of the process from the following summary:

Cobs are conveyed from cob warehouse by box

belting to the grinding and cleaning department, where they pass through separator, and all foreign material is removed and carried away. During this process all husks and chaff are removed by blower fan and passed to ironclad house on outside through metal pipe. This light stuff is later baled and shipped as material for mattresses.

The cobs are next conveyed by screw conveyor in metal trough to mill room, where they are elevated to third floor and passed to rolls through tin-lined spouting. During the milling process all pith and bee wings are removed by blower fans, conveyed to metal screw trough, where the heavier material drops to bottom and lighter is blown out to dust house. The heavier unusable stuff is brought to boiler house and used for fuel. The only part of the cob used is the hard inner core, which is reduced to meal in the mill room, whence it goes to the large bins in the warehouse and packing room.

The mixing department is on lower floor of this building and the various bins containing middlings, bran, low-grade flour, hominy, shipstuff and cob meal. The last-mentioned materials, such as middlings, hominy, etc., are purchased from the various mills throughout the country and are loaded from cars to bins from sidetrack. There is no further process gone through with this material, as it is all ground and ready for mixing. Material is conveyed to the top of various bins by elevators and drops down to hoppers on the first floor, which empty into a metal screw conveyor, the material being thoroughly mixed by this process. It is again conveyed to third floor by elevator, where it is bagged and shipped.

The writer goes on to say that "it makes a very rich stock food and can be sold at a profit for less than the price of bran." The latter half of the statement is true; the former, to draw it mildly, is debatable. The trouble with these mixing establishments is that the cob meal is used to simulate mill feed that is rich in middlings and floury particles. With it is mixed stuff of inferior feeding value. The result is a mixture deficient in protein and far below mill feed and bran in feeding value.

SHIPPING SUBSIDIES.

The scheme of the Ship Subsidy (Merchant Marine) Commission now before Congress, in a few words, is one to increase tonnage taxes on domestic and foreign vessels, and pay in rebates to American ships on the basis of gross tonnage a subsidy of from \$2.50 per ton in the lowest class of sailing vessels to \$5 per ton to steamships, on condition that the crews of these vessels shall constitute a naval reserve.

"A practical application of the bill will explain the whole measure," said Representative Miner, one of the members of the House Committee on Merchant Marine, and a member of the Subsidy Commission. "Suppose you take," said he, "a ship of 4,000 tons, making on an average six trips a year and paying, according to this bill, in round numbers, we will say, \$3,400 a year in tonnage taxes. Under our existing laws she would pay for tonnage taxes the sum of \$1,300. If she came under the proposed new law and carried a crew registered in the naval reserve the rebates due her on the basis of \$5 per gross ton would amount to \$2,000, making a difference of \$1,400 for her to pay. This would be but \$100 more than she now pays. In the meantime a similar ship belonging to a foreign country would be paying \$3,400 in tonnage taxes."

Excepting Galveston (with 3,582,104 bushels), Portland shipped more wheat in 1904 (2,709,871 bushels) than did any other port in the United States. It is the first time in the history of Columbia River shipping that Portland has had the honor of occupying second place on this list.

W. H. Fuller, to whom the people of Carlisle and Hazen, Ark., agreed to give \$1,000 if he could prove the adaptability of Arkansas soil in that section to rice growing by raising 35 bushels to the acre, on seventy acres, last season, raised 5,225 bushels of rice, or more than seventy bushels per acre, on seventy acres, near Carlisle. He had the goods to deliver at Little Rock on January 27 and on that day a carload of the rice was shipped from Carlisle by him to New Orleans.

THE NEBRASKA CO-OPERATIVES.

The annual meeting of the Nebraska Co-operative Grain and Live Stock Association was held at Lincoln on January 18 and 19. The proceedings were marked by the usual features. The first was an attack on the Omaha Grain Exchange and Omaha commission houses, and a resolution expressive of the "feelings" of the Association was offered by Editor C. Vincent of Omaha. It served as an escape valve for the surcharged delegates who, having obtained relief by the "debate," then accepted the suggestion of ex-Senator Brady, secretary of the Association, "to drop it."

The resolution was inspired by the following very sensible letter sent by an unnamed Omaha commission firm to the Farmers' Elevator Company of Waco, Neb.:

Replying to your favor will say we will be very glad to do business with you if we are assured you are doing business on business principles. We may be mistaken in our information, but we understand your constitution has what is known as "a penalty clause." This penalty clause we regard as detrimental to business in general and not a proper clause to have in the constitution.

Some years ago the Standard Oil Company was getting a rebate from the railway companies of 50 per cent of all freight charged them on shipments. They not only got this 50 per cent themselves, but they compelled the railway company to charge their competitors (that is, the competitors of the Standard Oil Company) full tariff on all freight and to pay them the 50 per cent rebate on these shipments also. To us it looks as though a farmers' elevator company, and, in fact, any elevator company, that has a penalty clause is emulating one of the worst trusts in the country.

We have several farmers' elevator companies on our list and are very glad to do business with them. It is immaterial to us what price they are paying the farmer as long as they have no penalty clause and do business on business principles. If you can show us by return mail that you have no penalty clause in your constitution we will be very glad to receive your shipments, otherwise we will have to decline the same.

That cheap agitator, Editor Vincent of Omaha, who has in some way become a member of the Omaha Grain Exchange, supported by O. G. Smith of Kearney, led the demand for a "resolution." Vincent had a grievance—he always has; also a new grain company to exploit—as usual; it's his semi-annual habit. He invariably has at each meeting a new "big company" to be formed to gobble the property of the local associations, several efforts in which line by him have already been very successful failures. His latest scheme, presented on this occasion, was a new "line" company, which is "now operating three elevators in Buffalo County, and will in the near future establish others." This new concern is called the Farmers' Grain Company, C. Vincent, president; capital, \$200,000. Mr. Vincent appears to have failed to capture this meeting, however; the crowd seemed to be next to his kind of bubbles and passed him up.

Having got rid of Vincent, the farmers proceeded with the "experience meeting," on the basis of which a resolution was adopted instructing the legislative committee to secure, if possible, the enactment of a law that would give the farmers' elevators equal freight facilities and rates to those enjoyed by the "line" companies. President Roosevelt's campaign for "fair play" to all was commended.

Ten new members were admitted—companies at Eustis, Sutton, Davenport, Keene, Axtell, Fullerton, St. Edward, Hastings, Saronville and Vincent's new outfit.

The secretary was instructed to visit local associations in the state not members of this, the state organization; and one gentleman enthusiastically stated that as the real estate of Nebraska amounted to enough "to buy out John D. Rockefeller and all the rest of his gang, and have enough left to buy beer for the crowd," he would suggest that the secretary's salary be raised from \$10 to \$25 or \$50. It does not appear, however, that this heroic raise of 250 to 500 per cent was agreed to.

Officers were elected as follows: J. S. Canaday, Minden, president; L. S. Deets, Kearney, vice-president; James T. Brady, Albion, secretary; O. G.

Smith, Kearney, treasurer; legislative committee, Canaday of Minden, Smith of Kearney, Ellers of Harvard, Brady of Albion; board of directors, first district, H. H. Hanks of Nebraska City; second district, Jacob Ellers of Gretna; third district, D. J. Gates of Albion; fourth district, D. W. Baker of Benedict; fifth district, J. S. Canaday of Minden; sixth district, L. S. Deets of Kearney; at large, James T. Brady of Albion.

On the second day there was a heart-to-heart talk on dues. There was "considerable divergence." "So far it has been the plan to grind down the dues till economy herself fairly trembles," said a member. "We ought to liberate a little coin. We are having a good fight with the trust. Anything that we can do to show it and the public that we have backing should be done. We can succeed and will surely do it in the long run. There is no need to hamper ourselves. A per capita tax of \$1 per year for every member would furnish us money to keep a man or more in the field all the time looking up market conditions. We could do this better than at present with a tax of \$10 per local organization."

Several men said that if such were done they felt sure their organizations would lose members. "There are some people you simply cannot convince," he said. "They go right on submitting to railroad and trust imposition. As long as they can sell their grain at all they are satisfied. They cannot see far enough ahead to perceive that \$1 a year each expended to keep a steady channel between their fields and the best markets would be abundant money in their pockets."

From all of which it appears that the farmers are like some other people handling grain, only more so.

The following resolutions were adopted:

We, the Nebraska Grain and Live Stock Association, in meeting assembled, reaffirm our faith in the principles of co-operation, believing the same to be of the most vital importance to the upbuilding of our agricultural state. We congratulate the founders of our state association for the splendid progress made in the work of organization, notwithstanding the fact that they have met with the greatest opposition that ever opposed the rights of the producers.

We recommend the further continuance of the organization of local companies throughout our state and desire to extend to them the chance to become members of our Association and receive the benefits of the same.

We extend to the local companies our moral and financial support who are experiencing trouble with the transportation companies in the location of elevators and procuring sidetracks, and sincerely hope for the early adjustment of the same.

Be it resolved by this body that we as a state organization demand the aid and support of our members of the legislature in the passage of an elevator and railroad law that will give everyone who is or may become engaged in the buying and shipping of grain, stock and merchandise equal rights and privileges.

We denounce the vicious system of discrimination practiced by transportation companies in our state, denying the right of individual or farmer companies to load and ship their grain, and ask that laws be passed by this legislature now in session to eliminate this evil.

We heartily endorse the action of President Roosevelt in his message to Congress extending the powers of the Interstate Commerce Commission in the regulation of transportation companies and eliminating the vicious rebate system known to be in operation at the present time.

It might be added here that the Vincent crowd have incorporated the Farmers' Grain Exchange, with capital of \$200,000, to deal in grain on commission at Omaha. In this interesting aggregation, it appears, the name of James Butler of Kansas is resurrected and does duty as one of the co-operators, his colleagues being W. T. Redmon of Kansas City, Mo., S. H. Allen of Shawnee County, Kansas, and S. W. McComb and C. Vincent. The last named is a member of the Omaha Grain Exchange and will be able in that way to "stir up the animals" occasionally.

Chicago Board is talking of a black list. That's right. All boards should have one and exchange. Large majority of business men are fair and honorable. There are exceptions and they should be

blacklisted. Boards are organized for the protection of their members. They should be friendly although competitors.—King & Co. Circular.

WISCONSIN GRAIN INSPECTION.

It is known at Madison that the effort of two years ago to press a bill creating a state grain inspecting and weighing department for Wisconsin will be revived during the present session of the legislature. The movement has, however, no support by the grain trade in Milwaukee and but little at Superior, where the bill of two years ago originated and was hotly supported by a few grain men and a large number of business men, neither directly nor remotely connected with or interested in the grain trade, but who acted wholly from a sense of local pride, which was as ignorant of trade conditions as it was vociferous and determined.

The apathy this year of Superior's grain men, who have recovered from their spasm of two years ago, superinduced by one or two men with "knives up their sleeves" for the Minnesota inspectors who have handled the grain stored in Superior houses and bought and sold by the Duluth Board of Trade across the bay, has quite incensed certain business men who threaten to "force the grain men into line or suffer the consequences," whatever those may be. The grain men can see no benefit in a state law for them or the city of Superior or the grain shippers to the head of the lakes; but the hardware dealers, grocers, laundry men and the like who two years ago supported the bill want it now and will try to force the grain men to its support.

Seed corn selected from the middle of the cob has much greater vitality than kernels shelled from the tips and butts of ears, according to recent experiments conducted at the Minnesota experiment station. A number of ears of corn were selected so as to give uniform results, and the tips, middles and butts were carefully shelled. Twenty-five of the seeds were then selected from each part of the cob. They were planted in sterilized sand containing no plant food. The seeds were all planted at the same depth and allowed to grow twenty days from the time of planting. Of the seed selected 68 per cent from the tips and 88 per cent from the middles and butts germinated. The total growth of the tips was 377.5 centimeters and the average growth per plant was 22.2 centimeters; butts, total growth, 442.5 centimeters; average growth per plant, 26 centimeters; middles, total growth, 491 centimeters; average growth per plant, 28.9 centimeters, showing a gain of 30 per cent for seeds from the middle of cobs over the tips and of 11 per cent over the butts.



Unsisterly.—Sister Chicago isn't acting prettily over Minneapolis' Conquest.—Minneapolis Times, January 14.

COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

TRACK SCALES LESS ACCURATE THAN HOPPER.

Editor American Elevator and Grain Trade:—It is my opinion that track scales are not as accurate as hopper scales. In the past two years I have found that there are more complaints from track scales of small shortages than there are on hopper scales. Then, again, the large elevators in all terminal markets would have to be equipped with two or more track scales, as the cars are run directly through the elevator, and there would be a loss of time to switch the car back and forth to weigh on one single scale.

Yours truly, JAS. H. WARREN,
Supervisor of Weighing for Merchants' Exchange.
St. Louis, Mo.

CONDITIONS NECESSARY FOR TRACK SCALES.

Editor American Elevator and Grain Trade:—In my experience of the past fifteen years I have found both track and hopper scales satisfactory. Where track scales are built on a solid foundation, such as piling or concrete, or both, and are high and dry and well housed over to protect them from the weather, the weights are reliable; but they need repairing oftener than a hopper scale. The hopper scales, being inside of a building, are always dry, and are not affected by the weather and consequently are longer lived than the track scales.

Yours truly, F. F. CLAPP,
Chf. Weigher Chamber of Commerce.
Milwaukee, Wis.

AN OBJECTION TO TRACK SCALES.

Editor American Elevator and Grain Trade:—The general opinion is that track scales for terminal elevators are not satisfactory, for the reason that most elevators load and unload from three or four tracks at the same time, and in order to use track scales would have to have three or four sets of them to handle the business. Then again, track scales are more liable to be affected by the weather, or by snow or ice, or other things, so that they do not weigh as accurately as the inside hopper scales. Some of the industries and terminal elevators have both track scales and inside hopper scales, so that they can weigh against each other and compare results, to be sure their weights are right all of the time.

Yours truly, G. C. CLARK,
Ch. B. of T. Com. on Weights and Measures.
Peoria, Ill.

THE AUTOMATIC GRAIN SCALE.

Editor American Elevator and Grain Trade:—Has the automatic scale a place in grain elevators? From our experience, we would most certainly say, Yes. Previous to the installation of our scale we rarely knew how much grain we were loading out, and could never tell exactly what our shrinkage was until the house was entirely empty; nor did we know the amount of grain in the house. Now, by reference to our books, we can tell exactly how we stand in a very few minutes and can locate any large shrinkage as soon as we get returns.

Our scale (Richardson) is absolutely accurate, simple, and registers the amount of grain going through it, and needs no attention. The only time we go to it is to take off the register after loading a car. It is so heavily constructed that it must necessarily be a long lived machine.

We are certain of absolute accuracy after giving the scale many tests. In many cases we load cars directly from the wagon scales, and at other

times we sell corn to cattle feeders out of our house, when we elevate the corn out through the scales and loading spout into the purchaser's wagon, and then weigh on our own wagon scales. The two weights in most cases are the same, and we have never had a difference to exceed 10 pounds. At another time we sacked a lot of grain from the loading spout and the difference was about the weights of sacks.

Yours very truly,

HOLZMAN-BENNETT GRAIN CO.
Grant Park, Ill.

PREFERS THE HOPPER SCALE.

Editor American Elevator and Grain Trade:—From my own experience in weighing I would say that it would be impracticable in Cincinnati to use track scales, as the elevators here are not constructed to place track scales inside of the houses. Track scales would have to be in the "dry" to give correct weights.

I find that hopper scales which have a good foundation that will not sink will give correct weights.

Track scales in the "open" will freeze and become bound and, therefore, cannot give correct weights. If the elevators had the room to place track scales in the "dry," then the track scales would give as correct weights as the hopper scales.

Respectfully yours,
WEIGHER CHAMBER OF COMMERCE.
Cincinnati.

THE TRACK SCALE FAVORED CONDITIONALLY.

Editor American Elevator and Grain Trade:—Relative to the comparative reliability of hopper scales and track scales, I will say that, considered as a weighing machine, theoretically speaking, either type of scale is reliable, but certain conditions exist in either case that must be taken into consideration when discussing the question of results of weighing on these two kinds of scales.

With the modern track scale, properly set and sealed, on an absolutely solid foundation and the scale under cover, in order to avoid false balance caused by wind pressure, there can be no question but that track scale weighing is the ideal method.

Now, while it is argued that the track scale is subjected to harder usage than the hopper scale, because of the shock and impact of the load imposed, still, with an unyielding foundation provided, it means simply a matter of wear to which all machinery is liable, which is generally taken into consideration in the manufacture of track scales by making all parts heavier than the hopper scale parts, with a greater multiplication, thus decreasing the weight borne by the different knife-edges. If the foundation is substantial enough, there can be no derangement of the original planes of leverage, hence the scale must obey the law of leverage, and accurate weights must result.

When the hopper scale is used, especially where it is located in the top of the elevator or mill, as most hopper scales are, even though the scale itself be properly built on suitable foundations and in perfect seal, there are always the following conditions to contend with, any one of which can make a difference in the net results:

1. The possibility of grain being held back in unloading pit.
2. The possibility of grain being diverted from the garner by means of any switches or turn-heads that might be located at the head of the elevator leg.
3. The possibility of garner slides leaking.
4. The possibility of grain being held back in the scale-hopper.
5. The possibility of the scale-hopper valve or slide leaking.
6. The possibility of grain being held back in the garner.
7. The possibility of grain being taken up before weighing by any suction that might be used in the suction system of the elevator.

From the foregoing, it is apparent that there are seven chances for poor results connected with the

hopper scale method, none of which chances for inaccurate returns apply to the track scale.

The matter of possible binding conditions, such as a rail bind in case of the track scale, and the sub-hopper bind in case of the hopper scale, is about equal in both kinds of scales, both of which faulty conditions may be prevented.

In conclusion I would have it understood that when I declare in favor of the track scale, I mean that the foundations MUST be heavy and substantial enough to prevent possible settling of the several sections; and I would urge steel construction, believing that such a scale be set on solid concrete piers, and that the scale be equipped with the improved type-registering beam, as the only solution of the question of how to obtain the best results in weighing grain.

Very truly yours, P. P. QUIST,
State Weighmaster for Minnesota.

Minneapolis.

AGREED RAILWAY LEGISLATION IN INDIANA.

Editor American Elevator and Grain Trade:—The shippers' railroad commission bill, known as the Newhouse Senate Bill No. 22, that has received the approval of the shippers of this state, and particularly the grain men and millers, who have been foremost in the effort to secure its enactment, was referred to a committee of railroad men and representatives of the Indiana Shippers' Association. The committee was as follows: For the railroad companies—Judge E. C. Field, Chicago; Attorney Samuel O. Pickens, Indianapolis; Attorney D. R. Sims, Lafayette, Ind. For the shippers—James W. Sale, Bluffton, Ind.; ex-Senator E. H. Wolcott, Wolcott, Ind.; C. B. Riley, Secretary Indiana Shippers' and Indiana Grain Dealers' Associations.

After some three days of continuous session and labor, the committee agreed upon a commission bill, substantially the same as the Newhouse bill, and made an unanimous report, recommending that the same be enacted into law. This is a new departure in legislative matters, and particularly so where the railroads have been interested. The principal source of contention was with reference to the power the Commission should have in the matter of fixing rates.

The bill provides that upon a complaint, properly filed, challenging any rate, rule, classification, etc., the Commission shall give proper notice to the railroad or railroads interested and subpoena the necessary witnesses, with documents, papers, etc., to determine the correctness of the charge; and as the result of the investigation, if the Commission shall find that the rate is discriminative or unjust, and thereby too high, they may revoke the same and name a just rate and put the same into force within twenty days from the date of the finding, subject, however, to appeal to the Superior Court of Marion County by any party aggrieved. Should the railroads interested appeal from the Commission's decision, the existing rate shall remain in effect pending the appeal, provided they file with the court a bond to indemnify all interested parties, and they shall also issue to the shippers or receivers who pay the freight a certificate showing the amount of the excess of freight collected over and above the rate fixed by the Commission. Such certificates shall be payable upon the final decision of the Superior Court, within thirty days thereafter; and if the railroads should fail to pay any or all of them, the holders of any or all would have the right to bring suit in any county in the state through which the delinquent railroad runs, and the judgment shall include the amount involved in the certificate, reasonable attorney fees, and also a penalty of \$100; so that the railroads will doubtless make payment promptly upon final hearing by the Superior Court.

The shippers contended for the Commission's rate to go into effect and remain in effect pending the appeal, but the railroads' contention was that if they should finally succeed in establishing the justness of their rate, after the decision in the Superior Court, they would have no lien on the property of the shippers, and it would be an inter-

minable matter to collect of them the difference, while by the issue of the credit slip and making provision for payment as indicated, the shipper would have absolute protection in the event the rate of the Commission should be sustained by the courts.

The bill provides also for heavy penalties on the railroads for the payment of rebates or other discrimination, and also places a like penalty upon the shipper who accepts rebates.

The provision with reference to the Commission is that there shall be three commissioners appointed by the governor, one of whom shall be of a different political faith from the others.

It is believed that the General Assembly will pass the measure as agreed upon between the shippers and the railroad companies, and that the same will become a law within a reasonable length of time.

Yours very respectfully,

C. B. RILEY, Sec'y.

Indianapolis, Ind.

THE DRAWBACK RULING.

The drawback decision of Attorney-General Moody was not unexpected, the principle having been in practice in the iron and paper trades at least ever since the Dingley bill became a law. But the admission of Canadian wheat to be milled for export with American wheat, with a rebate in proportion to the duty when the flour is exported, has stirred up the farmers of the Northwest in protest. They have no objection to the rebate being paid to American manufacturers of steel using imported ores or to paper makers using Canadian pulp or raw spruce lumber when these goods are exported. But wheat—that's different; and within four days after Mr. Dingley's decision Senator Hansbrough introduced, in the form of an amendment to the sundry civil bill, a measure to repeal the drawback provision of the Dingley act, in so far as it applies to wheat, which amendment was referred to the committee on appropriations.

The North Dakota farmers assume that the rebate allowance will reduce the price of wheat. It does not appear, however, in the market quotations that it has acted as a bear influence; and Edward G. Heeman, in his comment of January 31, the day before the decision was published and two days after a report had been printed that the decision of Mr. Moody would be the other way, said:

"When the question of refunding the duty on Canadian wheat mixed with American wheat was first brought up, a great hubbub was created by the bulls. The trade jumped at conclusions, and in a few days our market declined from \$1.14½ to \$1.08½, because it was construed as a bear argument. Messages galore were sent to Washington. Then, upon reflection, everyone saw that it could not help but prove a bull factor, as it meant that just so much of our wheat would have to be exported that otherwise would not be; and the market quickly recovered the ground lost and more, too. Now that it is settled once and for all time, that there can be no mixing, it is still construed as a bull argument. That, however, is characteristic of the perpetual bull. It reminds me of the campaign managers before election day—claim everything. The positions of the bulls in wheat must indeed be getting very uncomfortable when they have to grasp at straws."

On the other hand, the millers across the line, if Robert Meighen of the Lake of the Woods Milling Company expresses their sentiments, are willing to go to the length of an export duty on wheat in order to prevent its being milled in this country. "I am strongly in favor of having our raw material manufactured in Canada. I don't care by what name you call it. If an export duty on raw material does not appeal to the average mind, baptize it by some other name, but legislate in the direction of having raw material manufactured in the Dominion," he said to the Montreal Board of Trade on February 4, when the annual meeting was held. "If an export duty be required to compel the manufacture

of Canadian wheat on Canadian territory, by all means adopt that policy. But, better still, let the representatives of the people in the House of Commons stand up, apart from any political issues, and adopt and pass resolutions in favor of a policy that will prevent our wheat being milled in the United States. I prefer to have a resolution passed by our government in favor of the Chamberlain policy, which will admit Canadian products into the great consuming market of the world—Britain—free, and taxing the foreign, or more especially the foreign manufactured, article."

H. H. FREEMAN.

Hymen visits cottages and palaces, temples and Boards of Trade. His advent among the bulls and bears in no wise tends to advance or lower prices, but all the same, the appearance of the god bears a significant relation to future consumption as typifying the perpetuation of the race. He is a welcome visitor, however, and his latest achievement is to enthrall the well-known hay and grain merchant, H. H. Freeman, whose complete subjection to Hymen's royal mandates will take place on February 27, when he will be united at the Lakeside Club, Chicago, to Miss Retta Regina Schneider, and now his friends are showering their congratulations. Miss Schneider is a North Side young lady



H. H. FREEMAN, CHICAGO.

of musical accomplishments and prominent in North Side and South Side society. Immediately following the ceremony and wedding dinner they will start for a pleasure trip to the Pacific Coast, after which they will be at home to their friends in Chicago.

Mr. Freeman has been identified with the hay and grain business of Chicago since 1886, when he associated himself with his brother, M. M. Freeman. He became a member of the Chicago Board of Trade in 1892 and established the firm of H. H. Freeman & Co. in 1900, with offices at 66 Board of Trade Building. He has traveled through the Western states extensively, and has a personal acquaintance with very many Western shippers. His hay and grain business lies in every state tributary to the Chicago market, and his advice as to conditions governing the hay market is especially valued by country shippers of this commodity.

GRAIN APPEAL BOARD.

Applications for places on the Minnesota Grain Appeals Board at a salary of \$2,500 each are numerous enough; but Governor Johnson, unlike most "new brooms," seems inclined to act with deliberation, and has announced that he will make no appointments to the Board until after the Legislature has adjourned.

Among the candidates are Kinsey Maxfield of Minneapolis; M. Lally, a member appointed by Governor Van Sant; P. J. Carey, a retired farmer of Crookston, and Lars T. Høgy of Barrett, who manages a farmers' elevator.

EPPINGER CASE AGAIN.

The grand jury at San Francisco, on January 13, returned indictments against Jacob and Herman Eppinger, Joshua Eppinger and James Demings, charging them with fraud in connection with the gigantic warehouse certificate swindle.

Jacob and Herman Eppinger, brothers, were the principal members of the firm of Eppinger & Co. and are already under accusation in court, Jacob Eppinger having had a trial in which the jury disagreed. Joshua is a son of Herman Eppinger and took a prominent part in the business of the company. Demings was superintendent of the firm's warehouses at Crockett.

When the firm of Eppinger & Co. failed two years or more ago, for a million or more, and brought great scandal to that firm and to the grain market of San Francisco, Bernard Ettlinger disappeared from the city and went to Europe. On his recent return it is said he became provoked at the stories that he learned had been circulated about him during his absence, emanating chiefly, he believed, from the Eppingers. He therefore resolved to turn the tables and went to certain grand jurors to do so. He told them of many new and incriminating matters against his former partners, it is said. On this evidence the indictments were based. Ettlinger also implicated Joshua Eppinger and Demings, who, he said, were involved in the wholesale issuance of bogus warehouse certificates by which banks were defrauded out of hundreds of thousands of dollars.

It is now said that Demings will give state's evidence against the Eppingers, and when they are again tried it is said he will go on the stand and tell all about the juggling that went on in the warehouses of his employers. This is the testimony that the prosecution has been trying to get ever since the crash, and it is now confidently predicted that the next trial will result in a conviction.

Meantime a civil suit against the firm has been prosecuted by the creditor bankers who have been trying to recover a moiety of their claims from the wreck. The grain which was left in the Eppinger warehouses at Crockett was sold in 1903 after the firm's failure for about \$102,000 by the receiver, and the suit involved the distribution of that sum. Some of the banks asserted that the wheat and barley for which their receipts called were segregated and that they are entitled to what their separate piles brought, while the other creditors contended that all of the various lots of grain were so mixed and mingled that it was impossible to tell to whom any pile belonged, and that the proceeds of the sale should be distributed pro rata, according to the amounts of the claims. If segregation were established some of the banks would get about all that is due them and the others would get nothing.

Demings, the warehouse superintendent, testified that when a ship came for grain he would telephone to the Eppinger office in San Francisco, and received orders to deliver the wheat lying nearest to the berth of the vessel, irrespective of the lot number. In many cases this was done, and when, for instance, lot No. 720 was called for a portion of lot No. 706 would be given, and the numbers would be changed, so as to give the impression that the right grain was being given out. This practice went on for some time until, in the witness' opinion, it was impossible to identify the separate lots. Jacob Eppinger, when interrogated on the same subject, refused to testify. Edmund Freund, the bookkeeper, testified that many of the piles of wheat were made up from other lots; that in the course of cleaning wheat grain from other lots became mixed and that identification was impossible in those cases; and that for three years prior to the failure there had been no count of stock in the warehouse by comparison with the books, although formerly it had been the firm's usual custom.

After two weeks of trial an attempt was made to compromise the case on the basis of giving a

portion of the \$102,000 to the banks laying claim to special lots of wheat, and proceedings were temporarily suspended.

AN IOWA SEED CORN ESTABLISHMENT.

Some good people may have imagined, in view of the space given in the public prints to articles by the experts (and inexperts) on the importance



G. M. GWYNN, ESSEX, IA.

of high-grade seed, especially of corn, wheat, etc., that this doctrine of agriculture theory is of very recent promulgation. It is not, however, but the more recent work of the experts and the experiment stations may have modified earlier views of seed experts. In Southwestern Iowa, as an instance, G. M. Gwynn of Essex has for more than a decade not only been interested in good seed in a theoretical way, but has been practically engaged in the work of supplying it to farmers—originally to those of his own neighborhood, patrons of his grain elevator, but later to the seed trade generally, a business which has expanded in recent years so rapidly that his trade in seed corn is one of the most extensive in this country.

Mr. Gwynn is a Pennsylvanian by birth, and, like all good Pennsylvanians of the older sort, was an adventurous youth. Too young to enter the Union Army during the Civil War, always a matter of regret, he yielded at the earliest possible moment to the glamour of the West, where, prior to and during the war period, his father was in business handling cattle, and in August, 1867, bidding his family and friends a farewell, he started for the then Far West, where he joined his father in the stock business, remaining with him for a number of years.

In the course of their business operations, the father and son came in due time to Southwestern Iowa, as they crossed the state on horseback, the now great Burlington System of railways then stopping at Ottumwa, finding this, the greatest cattle and corn country of the world, a vast wilderness of prairie. The land claimed its own, however, and in 1872 young Gwynn married and settled down on a farm, three miles south of which is now the thriving town of Shenandoah. His first work was to subdue his prairie farm, and having done this, in the fall of 1876 he leased his acres and embarked in the grain business, which has been his occupation ever since.

As a progressive, intelligent grain dealer, he began to take an interest in the matter of bettering the quality and yield of the crops of his immediate neighborhood, and made it his business to procure better seed for his farmer friends, which he began distributing among his patrons. This was the beginning; and now, instead of a common corn crib from which he made selections of seed, his business buildings devoted to the seed trade alone have expanded to the handsome group shown in the

accompanying engraving, while the volume of his trade makes this one of the largest and most remunerative seed businesses in the West.

Located, as Essex is, in the very core of the greatest and what Iowans, with due respect for the opinions of others and the world at large, claim is the "best corn-producing section of country in the United States," the famous Nishna Valley of Southwest Iowa, where more and better seed corn, it is believed, is produced than in any other part of the corn zone, Mr. Gwynn has provided himself with buildings and appliances to handle seed corn to give the highest possible results to the farmer who plants it.

His seed house is 45x110 feet in size, two stories high, with drying cribs attached. Here he has storage capacity for 17,000 bushels, and at the same time room to work twenty experienced men in selecting and sorting the seed. This gives him an output capacity of 300 bushels selected seed corn daily.

The capacity of the receiving and shipping department is 15,000 bushels. Here all seed corn has its first sorting, and through this department it receives its final selection and handling before going out to market, the grain finally passed upon as ready for shipment going either into the car or to the large warehouse, 20x64 feet in size, with a capacity of 26 cars of seed.

In the picking room the first selections of seed are made, every ear being carefully examined, and the tips and butts shelled off by hand. Then it passes to the shelling, milling and sacking departments, where it is again reselected by older and longer-experienced seed men, who, if any imperfect ear or irregular corn gets past the first pickers, will catch and remove it.

per Cleaner and Grader, made by the A. T. Ferrell Co. of Saginaw, Mich., and one of the best seed-grading machines on the market. Mr. Gwynn issues no catalogue, saying he has more calls for seed than he can grow and prepare, hence he puts out only a variety list, or growers' card list, of the standard varieties he raises.

In addition to the seed business he still runs his grain business, and with his newly equipped elevator, built on the Chase plan, he is able to take in and load into cars with ease 4,000 bushels of corn per hour, and at the same time receive, dump and deliver to cribs 600 bushels of ear corn per hour. The elevator is 30x60 feet in size, with two stands of elevators, and located so as to load two of the largest cars at the same time. It has one double dump at each elevator, with the ear corn dump in the middle. One man can handle the entire house, so complete are all its arrangements.

The elevator machinery, as is that of the seed house, is run by a 7-horsepower Foos Gasoline Engine, considered by Mr. Gwynn among the best and most economical engines on the market, his two engines not causing the loss of an hour's time and making but one dollar of expense in repairs in five years.

Essex, Iowa, is situated in the western part of Page County, on the Red Oak and Nebraska City branch of the C., B. & Q. R. R. It has a population of about 1,000, and can boast of its quota of churches and as good public schools as there are in the West. All lines of business are well represented and all are prosperous.

The grain inspector of Washington reports for the calendar year 1904 the receipt at Coast ports of 3,824 cars of wheat, 600 of oats, 554 of barley



VIEWS OF AND IN G. M. GWYNN'S SEED CORN ESTABLISHMENT AT ESSEX, IOWA.

Mr. Gwynn's seed business is growing at such a rate that, with a reserve of 60 cars of seed corn before shipping out any, he is scarcely able to take care of the trade by meeting the increasing demand and hurry-up orders. He has recently installed another No. 9 Improved Air-Controller Clip-

and one of rye, a total of 4,984 cars, against 5,121 in 1903.

The material for the Independent Elevator Co.'s new 1,000,000-bushel elevator in Omaha, Neb., is now on the ground and construction work will be commenced not later than March 1.

ANNUAL MEETING OF INDIANA STATE ASSOCIATION OF GRAIN DEALERS.

One of the best of the Indiana state meetings that has been held convened in Hotel Claypool, Indianapolis, on February 8, the sessions continuing over until the day following.

President A. E. Reynolds of Crawfordsville called the first session to order at 10:30 a. m., and the floor was immediately given to John McCardle of New Richmond, who read the following resolution, which was adopted:

Whereas, The grain dealers of Indiana have had their fire insurance rates raised by the stock insurance companies to a price that the business cannot afford to pay; and

Whereas, The grain dealers have for years patronized the mutual fire companies of this and other states at a saving of from twenty-five to fifty per cent of the price charged by stock companies; and

Whereas, The grain dealers are fully conversant with the premium notes and cash assets offered by the mutual companies as security and have had the stock company rates reduced the past year on country elevators through competition of the mutuals; be it, therefore,

Resolved, That the Indiana Grain Dealers' Association requests the representatives and senators of the legislature to vote for House Bill No. 2, without amendment, for the admission of mutual fire companies of other states, having the same assets required of the mutual companies of Indiana.

The resolution was passed thus early as a moral influence in favor of House Bill No. 2, which received the warm support of the grain dealers and their friends during the two days' sessions.

As the work of the two days' sessions was largely embodied in the report of the committee on resolutions, and as the report embraces subjects of great interest to grain men, we publish it in this part of our report, as follows:

RAILWAY LEGISLATION.

Whereas, It is a self-evident fact that in the matter of the interstate commerce abuses exist in the attitude of the common carriers toward the shippers of the country, in the payment of rebates, in the operation of private car lines, and in arbitrary treatment in the adjustment of claims and complaints, to the detriment of the public; and

Whereas, President Roosevelt has recommended and strongly urged legislation that will remedy these evils; therefore, be it

Resolved, By the Indiana Grain Dealers' Association, that we heartily endorse the President's action in this matter; and be it further

Resolved, That the senators and representatives from Indiana in the Congress of the United States be requested to use their influence toward enacting into law, at the present session of Congress, the recommendations contained in the President's Message, that "the Interstate Commerce Commission should be vested with the power, where a given rate (for transportation of property in interstate or foreign commerce) has been challenged and after full hearing found to be unreasonable, to decide, subject to judicial review, what shall be a reasonable rate to take its place, the ruling of the Commission to take effect immediately and to obtain until it is reversed by the courts."

REGULARITY OF DEALERS.

Whereas, The directors of the Toledo Produce Exchange have adopted a resolution containing the following words: "When any grain dealer has an elevator equipped for the proper handling of grain, that he be recognized as a legitimate dealer, whether he belongs to an Association or not;" be it

Resolved, That this Association does not now take, nor ever has it taken, the position that a dealer must be a member of this Association, to constitute regularity, as implied in the aforesaid resolution.

STATE RAILROAD COMMISSION COMMITTEE.

Whereas, We recognize the many conflicting interests and the many difficulties arising in the preparation of a state railroad commission bill, be it

Resolved, That this Association appreciates the just and fair position assumed by Messrs. Field, Pickens and Sims, representing the railroad interests in the conference committee on this bill; and that we commend the shippers' representatives, Messrs. Sale, Wolcott and Riley, for their labors in the conference, and that we give their report our unqualified approval.

Be It Resolved, That we, the members of the Indiana Grain Dealers' Association, do hereby commend the eminently fair position of Governor Hanly

in his recommendation to the legislature as to railroad commission legislation.

LEGISLATIVE BILLS ENDORSED.

Whereas, The Indiana grain dealers are vitally interested in the railway commission bill and the branch landlord lien bill; therefore, be it

Resolved, That the Indiana Grain Dealers' Association endorses the railway commission bill agreed upon by the committee appointed by the Indiana Shippers' Association, in conjunction with the railway interests; and that we further give our unequivocal endorsement to the Branch Landlord Lien Bill, and earnestly recommend the passage of both by the Indiana General Assembly.

WEIGHTS AND GRADES IN INDIANAPOLIS.

Your committee further reports that, having considered the special report referred to it, concerning weights, grades and other matters obtaining in Indianapolis, under supervision of the Indianapolis Board of Trade, recommend adoption of the following resolution:

Resolved, That the Indianapolis Board of Trade be requested that all grain inspected in Indianapolis shall be weighed by sworn weighmasters in the employ of the Indianapolis Board of Trade and that such weighmasters shall issue certificates of weights setting forth grade of grain, condition of car, if leaking; and if grain is re-cleaned, stating the fact, and giving weights before and after cleaning, with value of screenings and credit for same.

Following the adoption of the resolutions on insurance, President Reynolds gave an informal address, in which he compared the condition of the grain man twenty years ago with that of to-day. The grain man of 20 years ago was seldom an important man in his community. His credit was invariably poor, his elevator badly equipped, and, in spite of margins of from 5 to 10 cents per bushel which he took for handling grain, he did not make money. To-day the grain man is well equipped to do business; his credit is good, and he can get all the money he needs at fair rates. His margin of profit is from 2 to 2½ cents per bushel, and with this small margin his business is conspicuously prosperous, just as formerly, with higher margins of profit, it was conspicuously unprofitable. Associations were not entirely responsible for this condition of affairs, as it was due to the grain men themselves, through the improvement of their properties and greater economy in handling grain. The real work of bringing about these conditions was done by about 25 per cent of the grain dealers of the state. Dealers should not be discouraged on this account, however, for the universal rule was that a few did all the work and supplied all the funds. We need all the grain men of Indiana to help us, however, and we hope to see them come with us. Formerly meetings of grain men were held behind closed doors, but now we invite the press to be present with us, and we extend a hearty welcome to our farmer friends to attend our sessions.

C. B. Riley then read his annual report as secretary:

SECRETARY'S REPORT.

Your Secretary entered upon the duties of the office on February 1, 1904, after qualifying as successor to Mr. S. B. Sampson, who transferred to the present incumbent the property and funds of the Association, including the sum of \$1,218.13, which amount was received and transferred to Bert A. Boyd, treasurer.

Pursuant to the settlement made with Secretary Sampson by the board of managers, warrants were drawn on the treasurer, aggregating \$362.85, in payment of the amount due him and on account of bills unpaid at the expiration of his term of office.

Preliminary financial report:

Total Cash Receipts, all sources, during the year	\$5,455.78
Total Cash Disbursements, all sources, during the year	4,788.43

Balance on hand	667.35
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For further financial report, reference is made to the accompanying financial statement of the Secretary, covering receipts and disbursements down to and including January 31, 1905:

MEMBERSHIP:—The membership of this Association in good standing on December 31, 1904, as classified, is as follows:

Resident Shippers	270
Resident Receivers	13
Non-resident Receivers	34
Honorary members	5

Total membership, every class	322
Additional stations	120

During the year your secretary has attended forty-four local meetings and has been represented by Mr. Sampson, Mr. Garrison and others at about ten additional meetings.

MEETINGS OUTSIDE OF THE STATE:—As a representative of this Association, the Secretary during the year attended four meetings without the state, as follows: The Grain Dealers' National Convention at Milwaukee, the National Hay Dealers' Convention at St. Louis, the Interstate Commerce Law Convention at St. Louis, and the hearing before the Interstate Commerce Commission at Chicago on the subject of the uniform bill of lading. At each of the meetings and conventions, the Indiana Grain Dealers' Association was recognized and its representative accorded proper hearing and courteous treatment.

THE MEMBERSHIP:—The membership generally throughout the state is in fairly good condition, especially when we take into consideration the fact that short and immature crops have made it a difficult matter for many to realize fair profits on their investments and efforts. Some have forfeited their membership for that reason, and others because of local difficulties that have not yielded to treatment. There are a few of the latter class that seem to think the Association a failure because it could not force unreasonable and contentious competitors to do right, under all kinds of conditions, notwithstanding our great Creator had exercised His prerogative in bringing into existence the offensive competitor, apparently without thought of his ultimately engaging in the grain business in competition with the parties thus complaining. Some failures under such conditions have been made the basis for withdrawal from the Association, greatly embarrassing all efforts for the betterment of conditions. The Association, under such conditions, is compelled to exert greater effort on account of such withdrawals to prevent the spread of the influence, far more potent than if the party had never been a member.

In the effort to adjust local difficulties, usually the greater amount of good has followed the joint effort of the Association and the neighbor dealers, who have realized the value of their friendly offices in bringing about amicable adjustments, where competitors were distrustful of each other. For such assistance the secretary is profoundly grateful and the membership the beneficiary.

SCOOP SHOVELERS:—The scoop shoveler has been especially active during the past year, and his influence has been to disorganize and discourage many faithful members. Strenuous efforts have been made to minimize the effect of his work, but yet there are some chronic cases that have not yielded to the most heroic treatment, while many have ceased and are no longer a menace to the regular dealer who has an investment in equipment and keeps his market open the year round for the benefit of the producers, who should reciprocate by their patronage.

RECEIVERS CAN HELP:—The receivers, generally, have done something and can do much to facilitate the efforts of the Association and its members in driving out the irregular and unreliable shippers, whose influence, like a hideous nightmare, now hovers over regular shippers and threatens their every honest and faithful effort to exemplify in their conduct the influence and value of Association work. Some receivers have expressed the view that they should not be expected to decline business tendered by such irregular dealers, except upon the understanding that regular dealers benefited reciprocate by transferring their accounts to them. This certainly is too restricted a view, and doubtless not entertained by many, and certainly will not commend itself to all fair-minded shippers. However, I believe in reciprocity, and think there should be expressions of appreciation on the part of the shipper thus benefited and a mutual co-operation should follow when practicable.

RESOLUTIONS ADOPTED AT CHICAGO AND TOLEDO:—The attention of the members is called to the resolutions adopted by the Chicago Board of Trade, the Toledo Produce Exchange, and possibly other similar organizations, on the subject of handling grain from any and all shippers that have facilities for handling the same, irrespective of their status as to regularity. A full exchange of views on this subject might be beneficial to both the Association and the members of the respective organizations that have so expressed themselves. The following is a copy of the resolution adopted at Toledo:

"Non-resident Dealers O. K. if They Have Proper Facilities.—The directors of the Toledo Produce Exchange have endorsed the following: 'Resolved, That the members of this Exchange refrain from bidding or recognizing scoop shovelers; and it is the sense of this Board that when any grain dealer has an elevator equipped for the proper handling of grain, that he be recognized as a legitimate dealer, whether he belongs to an Association or not.'"

LEGISLATION:—Much time of your secretary has been given during the past four months to legislative work, necessarily preventing his attendance at local meetings over the state, though not in any manner to the neglect of the regular work of the Association. The special legislative work referred to has been that in connection with the Indiana Shippers' Association, in an effort to secure the enactment of a law creating a railroad commission. The success of the effort is well understood by you and needs no further mention in this report, other than to say we hope to have the Newhouse Railroad Commission Bill passed by the Senate and House during your visit here.

RECOMMENDATIONS:—Your secretary is of the opinion that the arbitration rules of the Association should be so changed that the committee on arbitration should consist of at least five members, any three of whom shall constitute a tribunal for hearing and determining causes; that each of the parties to the controversy should be privileged to select one from the five and the president or secretary of the Association select the third member, who should be the chairman of the trial committee; appeals from the committee should be to the board of managers in about the same manner as now to the arbitration committee of the National Association. Possibly some provision might be made for certain cases to go to the National committee, such, for instance, as where members of the National Association are interested and where they signify, on instituting their cause for trial, that they reserve the right to go to the National Committee on appeal, instead of to the board of managers of this Association.

The arbitration committee, consisting of five, should embrace at least one or two receivers and the rest shippers, as most every case for arbitration involves the rights of receivers as interested parties, and it is fair that they should have the right to select, as a member of the committee of three, one of their own kind, or, at least, one skilled in the particular kind of business in which they are interested and out of which controversies usually grow.

Your secretary would recommend such changes in the rules governing arbitration as will enable members of our Association to arbitrate differences with the members of the Indianapolis Board of Trade, the board of managers of that organization having passed a resolution authorizing such arbitrations on reciprocal terms. Copy of the communication containing the resolutions is now on file and ready to transmit to your committee on Constitution and By-laws.

On motion by P. E. Goodrich the report was accepted and placed on file.

The report of Treasurer Bert Boyd for year ending January 31, 1905, showed cash on hand February 1, 1904, \$1,218.13. Receipts from all sources, \$5,455.78. Total disbursements, \$4,788.43. Leaving cash in treasury, \$613.48, and cash in hands of the secretary, \$53.87.

Mr. Reynolds appointed the following committees:

Resolutions—C. S. Bash, Ft. Wayne; A. F. Files, Muncie; J. M. Brafford, Winamac.

Nominations—Thos. Morrison, Kokomo; P. E. Goodrich, Winchester; J. R. McCardle, New Richmond; R. M. Wilkinson, Brookston; E. W. Ball, Rushville.

Constitution and By-laws—J. R. McCardle, W. S. Gilbreath, Indianapolis; R. Barr, Chalmers.

On motion by Mr. McCardle, Messrs. Loughry, Wood, Brafford and Files were appointed a committee to wait on Governor Hanley, who had been ill, and extend to him the good wishes of the Association.

Mr. Brafford moved that such part of the secretary's report as referred to the By-laws of the Association be referred to the committee on By-laws, and that the financial report be referred to the auditing committee.

The chair appointed as auditing committee: P. E. Goodrich, Winchester; J. B. Ruple, La Porte; C. Jackson, Falmouth.

President Reynolds spoke of the importance of sealing cars, and introduced Chas. J. Webb, general sales agent at Chicago of the International Seal and Lock Co. of Hastings, Mich. Mr. Webb made a short talk, in which he set forth the advantages of the Tyden Seal, which he is introducing to the shippers at large. The meeting then adjourned.

AFTERNOON SESSION.

President Reynolds called for order at 2 p. m. and called upon C. A. McCotter, secretary of the

Grain Dealers' National Mutual Fire Insurance Co., for a talk on Insurance. Mr. McCotter spoke of the "self-inspection" feature of their company and the good results to policyholders that would ensue from its adoption. He also spoke of House Bill No. 2, which had been carried to its first reading in the Indiana legislature, and urged all dealers to interest themselves in the passage of the measure.

The secretary read the following report from B. F. Crabbs, chairman of the committee appointed to confer with the Indianapolis Board of Trade on irregularities that had been complained of:

We, the committee appointed to confer with the Indianapolis Board of Trade in regard to some irregularities that had been complained of, beg to submit the following report:

On January 3, we conferred with a number of the representative members of the Indianapolis Board of Trade and found that they were perfectly willing to go into any investigation that would be of mutual benefit to them and the shippers to Indianapolis market. At this meeting it was arranged for the Board of Trade to appoint a committee to confer with your committee, at which time the matter of weights, grades and terminal rules at Indianapolis was fully discussed, and it was found that there was a disposition on the part of the Board of Trade to correct any irregularities that might exist.

Some complaint had been made that a shipper could secure certificates of weight only through his commission firm. Your committees urged that the shipper was entitled to such certificates from the weighmaster direct. This matter was discussed at length, but no final action has been taken by the Board up to this time, or, at least, no report has been made to your committee up to this time.

The inspection of grain at Indianapolis has been generally very satisfactory, as it is done under direct supervision of and by agents of the Board of Trade. But some of the weighing has not been so satisfactory, as some dealers insist on buying grain at their private weights and such weights have in some cases been very unsatisfactory.

In the matter of issuing weight certificates on grain that has been cleaned to make grade, such certificates should be plainly marked "re-cleaned," giving weights before and after cleaning and value of screenings.

Your committee would respectfully report favoring this Association's passing resolutions requesting that all grain received by Board of Trade members be weighed by sworn weighmasters in employ of the Board. Such weighmasters shall issue certificates of weights, setting forth grade of grain, condition of car, if leaking, and if grain is re-cleaned, stating the fact and giving weights before and after cleaning, with value of screenings.

Your committee is well aware of the fact that all complaints of short weights and off grades are not assignable to the receiver and commission men, and in this connection, we wish to caution all shippers to use extreme care in cooping cars and in loading nothing but good merchantable grain. If you have scales, be sure they are correct. Don't guess they are all right—know it; then weigh your grain carefully and be in position to defend your weights. If you have no scales to weigh your grain out, don't kick on the outturn; accept what is given you, and don't think you are cheated when you have no evidence of it.

Your committee wishes to further say that we think that Indianapolis grain market is as well equipped in the main as any other market, and would, therefore, recommend to the shippers of the state the use of this market whenever possible.

Mr. Yeoder, in behalf of the Indianapolis Board of Trade, said it was the desire of members to make that market attractive to shippers and that irresponsible parties were the cause of some of the conditions formerly complained of. The Board had adopted a system of supervision of weights, with the weighers under bond. He said if shippers wanted official weights from the Board, the latter would be furnished them.

The customs of other markets on the question of cleaned grain was brought up and E. W. Culver said of Toledo that in cases where grain had been cleaned the certificates were marked to that effect, with weights before and after cleaning, and the value of the screenings.

Mr. Gale and Mr. Hax said the same custom prevailed at Cincinnati and Baltimore respectively.

A. F. Files of Muncie in a paper discussed the question of scoopers and local associations and their value.

Secretary Riley read the following from C. S. Bash, chairman of the legislative committee:

I regret my inability to be with you to-day and wish to apologize. I also wish to say a few words on matters very close to the hearts of all of you.

It gives me great pleasure to know that the committee on legislation was successful in agreeing with the representatives of the railroads on a commission bill for the state of Indiana; and we have hopes that the same will be productive of much good to both the railroads and the shippers. The railroads certainly met us in a very friendly spirit and, if the intent of the bill is followed out, it certainly will not result injuriously to either interest, but will be highly beneficial to both. I note with considerable pleasure the report of Hon. Charles W. Priddy, president of the Virginia State Corporation Commission, on demurrage, and will take the liberty of quoting as follows:

In his report to the Virginia Board of Trade at its annual meeting in Norfolk, the president, Charles W. Priddy, told of the work he and the Board's executive council had done in connection with the demurrage rules of the State Corporation Commission. When the railroads appealed to the state Supreme Court, after the rules of the Commission were promulgated, Mr. Priddy, with the authority of the executive council, employed counsel, who united their efforts with those of the attorney-general, with the result that the rules of the Commission were sustained. The president said further:

In order that you may better understand what the adoption and enforcement of these rules mean to the shippers of Virginia, I would state that at the hearing before the Commission the manager of the Virginia Car Service Association testified that the annual receipts from demurrage and other charges amounted to \$70,000 or \$80,000, the greater portion of which, we think and contend, was unjustly collected. The best authority I have been able to consult on this subject tells me that the present rules will reduce these charges, on the same volume of business, more than 50 per cent and thereby make a saving to shippers of from \$35,000 to \$50,000 per year. Besides, we have also had the transportation people penalized for failure on their part to perform certain duties or give satisfactory service, and thus, you see, aside from the above-mentioned saving, we have a strong guarantee of better service.

There are many other matters of detail and minor importance which have claimed our attention, and which we feel have been corrected, to the advantage of not only our own membership, but the business interests of the state at large.

I, however, respectfully submit that if we have accomplished nothing more than the regulation of this car service and demurrage matter, we have done enough to commend this organization to the business interests of the state, and to demonstrate the importance, if not absolute necessity, of such an organization.

There is no question but the result of our railroad commission in Indiana will be equally beneficial and that the saving of this one item alone will pay the cost of our railroad commission twice over.

The Car Service Association of the state of Indiana is at present collecting from the receivers and shippers of this state about \$120,000 per annum, at a nominal cost for collection of somewhere about \$14,000 per annum. If a reciprocal demurrage rule could be put in effect by our commission, or an equalization rule that would be equitable and fair alike to both the railroads and their patrons, it would no doubt do much to lessen the very strong antipathy at present existing towards the railway corporations throughout this state.

It is my sincere desire that every member of this Association take up the matter at once and see personally his senator and representatives before returning home and have a talk on our bill. You will note by referring to a copy of our bill, also, that it fully covers the uniform bill of lading feature, which is condemned very severely by the most prominent attorneys of the railroads, who were in consultation with your committee. I do not think there is any question but they will stand ready to do away with the uniform, or non-negotiable, bill of lading, as well as materially change the car service rules. With these two matters out of the way the commission will no doubt have the co-operation of the railroads heartily in many other reforms for which the commission is to be created.

The meeting then adjourned until the following morning.

THURSDAY MORNING.

President Reynolds called the Thursday morning session to order at 10 a. m. and called upon E. H. Wolcott to address the meeting. Mr. Wolcott complimented the Association on its growth and said that he was specially interested in passing the railway commission bill then before the legisla-

ture. He said that grain men especially should use their influence to have this bill become a law.

C. A. Burks of Decatur, Ill., was introduced as a visitor from their neighboring state, and made a short address.

Mr. Reynolds spoke in very strong terms against the statements of the Board of Insurance in their efforts to kill the insurance bill known as House Bill No. 2. He read a financial statement of the Grain Dealers' National Mutual Fire Insurance Co., showing its condition, its rapid growth and its value over the board companies.

Mr. Goodrich read a resolution, tendering an invitation from the Indiana Grain Dealers' Association to the Grain Dealers' National Association to hold its next annual meeting in Indianapolis in June.

The question was very generally discussed, and it was the general impression that Indianapolis and June were the right combinations to infuse new vigor into the National Association. During the discussion Mr. Reynolds paid a very high tribute to President Schneider, as a citizen, grain man and Association worker. He said that he trusted Mr. Schneider would be continued in office at the coming meeting and that he himself would not be a candidate for election.

The resolution carried.

Mr. McCardle read the report of the committee on Constitution and By-laws, as follows:

We, the committee on Constitution and By-laws, recommend that Rule 1 should read as follows:

Rule 1. That the President shall appoint, subject to the approval of the board of managers, a committee of five members on arbitration, whose duties it shall be to hear and decide cases, if within the jurisdiction of the committee, as hereinafter defined, and in which the question in dispute refers to the grain business, or matters pertaining thereto, and does not involve any question of the policy of the Association.

The committee on arbitration, consisting of five members, any three of whom shall constitute a tribunal for hearing and determining causes. That each of the parties to the controversy should be privileged to select one from the five, and the president or secretary of the Association select one from the remaining three, who shall be chairman of the trial committee.

The arbitration committee, consisting of five, should embrace two receivers, and the remaining three members, shippers.

We, the committee, recommend the following: That Article III, Section 2, of the By-laws, to read as follows:

Art. III, Sec. 2.—The election of officers shall be held at each annual meeting during the last sessions of the regular meeting, and they shall hold office for the term of one year, or until their successors have been duly elected and qualified. The election of the President, Vice-President and members of the Board of Managers shall be by the vote of members present, in good standing.

The election of the Secretary and the Treasurer shall be by the Board of Managers.

The Board of Managers shall be elected for terms of one, two and three years, and each year there shall be elected two new members of the Board to fill the vacancies of the retiring members.

The report of the auditing committee was read and adopted.

Mr. Files read the report of the committee on resolutions, as above.

The chair appointed Messrs. Boyd, Bell, Sale, Goodrich and Gilbreath a committee on arrangements for the National Association meeting, provided it should be decided to hold it at Indianapolis.

Thos. Morrison read the report of the committee on nominations, recommending that officers be elected, as follows:

George C. Wood, Windfall, president.

J. M. Brafford, Winamac, vice-president.

Board of managers: A. E. Reynolds, O. J. Thompson, Cloyd Loughry.

Both the retiring president, Mr. Reynolds, and incoming president, Mr. Wood, made short addresses. The report was adopted.

Mr. Files read a resolution, which was adopted, thanking Mr. Reynolds for his efficient services during his term of office.

The chair appointed a committee on arbitration, as follows: Messrs. Hazlerigg, Clark, Cooper, Webb, Bell.

The meeting then adjourned sine die.

CONVENTION NOTES.

J. B. Wm. Hax and John J. Snyder were present from the Baltimore market.

Two visitors from Illinois, C. A. Burks, elevator broker of Decatur, and J. W. Cryder, of Brocton Elevator Co., Brocton.

The Buffalo market was represented by T. G. Heinmiller with Alder & Stofor; E. L. Carroll, with the United Grain Co.; F. G. Winter, with H. S. Guthrie.

The lead pencil presented to dealers, bearing the stamp of the Grain Dealers' National Mutual Fire Insurance Company, unlike the former gift to be eschewed, was found to be a serviceable article.

Chas. J. Webb, general sales agent for the International Seal & Lock Co. of Hastings, Mich., had a display of the Tyden Seal, an article which is proving popular among shippers.

Cincinnati sent a delegation consisting of W. W. Granger, of Union Grain & Hay Co.; H. H. Hill, of The Metzger-Hill Co.; C. E. Van Leunen, P. M. Gale, F. E. Fleming, W. S. Todd.

Bert Boyd chaperoned a party of grain men to one of the local playhouses Wednesday evening. One of the comedians was a diminutive dwarf, who said while he was but three feet tall he was often long on corn.

From the Toledo market there were Edw. W. Culver, chief grain inspector; Charles Knox, with Reynolds Bros.; Fred W. Jaeger, of J. F. Zahm & Co.; W. W. Cummings, with J. J. Coon; John C. Keller, with C. A. King & Co.; Tom Corwin, with Southworth & Co.

The machinery interests were looked after by A. H. Kay, of the Kingsland-Kay-Cook Mfg. Co., St. Louis, Mo.; W. H. Kaiser and T. M. Van Horn, with the Weller Mfg. Co. Chicago; Chas. J. Webb, of International Seal & Lock Co., Hastings, Mich.; N. A. Grabill, Daleville, Ind.

The grain men in attendance included J. B. Sale, Bluffton; E. A. Reynolds, Crawfordville; John T. Nixon, Attica; C. G. Eggly, Berne; J. M. Brafford, Winamac; John C. Wood, Windfall; T. A. Morrison, Frankfort; O. J. Thompson, Kokomo; John R. House, Hobbs; C. F. Seaward, Kokomo; P. E. Goodrich, Winchester; John McCardle, New Richmond; Cloyd Loughry, Monticello; F. C. Davis, Swayzee; J. L. Schalk, Anderson; J. S. Hazlerigg, Cambridge City; F. W. Gilbert, Dana; E. W. Ball, Rushville; A. M. Wellington, Anderson; D. A. Baker, Butler; Edward Taylor, Montmorenci; E. L. Harris, Greencastle; R. B. Bruce, Sims; M. M. Kennedy, Templeton; M. Duffy, Audubon; C. J. Pickering, Middletown; S. J. Fisher, Packerton; G. W. Bishop, Walton; M. L. Conley, Frankfort; C. F. Miller, Ellwood; E. M. Wasmuth, Roanoke; Isaac Reed, Argus; H. A. Martin, Newcastle; T. O. Stanley, Lyons Station; Cary Jackson, Falmouth; A. F. Files, Muncy; J. H. Stewart, Manson; R. M. Sims, Seircleville; Chas. S. Masters, Brookville; E. M. Fisher, Needham; W. S. Fries, Greenfield; J. O. Finch, Frankfort; J. Warbough, Rolling Prairie; J. B. Rupel, La Porte; Robert Alexander, Lafayette; Walter Fink, Mt. Comfort; C. L. Northlane, Union City; J. J. Snodgrass, Hillisburg; A. N. Haycock, Sims; W. B. Foresman, Lafayette; H. M. Freeman, Dayton; R. M. Wilkinson, Brookston; W. H. Houck, Amboy; T. J. Ryan, Delphi; F. G. Heinmiller, Lafayette; G. W. Bishop, Jr., Walton; H. L. Wilson, Montpelier; J. P. Allen, Wheatland; Chas. Phillippi, Bicknell; W. T. Davis, Coatsville; E. W. Phares, Tipton; C. M. Barlow, Kokomo; C. W. Sims, Cyclone; E. K. Sowash, Middletown; A. M. Wellington, Anderson; J. S. Lowe, Butler.

MEMPHIS GRAIN DEALERS.

The Memphis grain dealers have organized an association and obtained a state license to incorporate. The following are among the charter members: H. H. Maury, Charles D. Jones, T. B. Andrews, Ike Chase, W. F. Brown, J. S. Buchanan, John R. Edgar, Joe Wade, V. L. Rogers, D. G. Patton, S. T. Pease, Walter F. Yates and W. D. Moon.

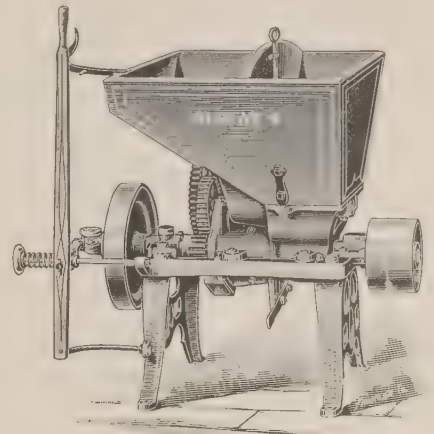
The grain dealers are, and will continue to be, members of the Merchants' Exchange, but have organized for the same reasons that inspire other grain dealers' associations, and also to encourage dealing in grain on the floor of the Exchange.

The association will affiliate with the Grain Dealers' National Association.

BOWSHER MILL FOR MEDIUM POWER.

The line of grinding mills manufactured by the N. P. Bowsher Company of South Bend, Ind., is a large one, embracing mills from 2 to 25 horsepower. The one shown in the cut is a medium-sized mill and may be run with 6 to 8 horsepower.

Like all other Bowsher Feed Mills it is fitted with conical-shaped grinders, which do the work close to the shaft. Owing to this shape, and the peculiar dress of the grinders, the Bowsher Mill is a very light running one and an especially good mill for grinding ear corn. However, all Bowsher Mills are perfectly adapted to the grinding of small



MEDIUM-POWER BOWSHER MILL.

grain alone. In a word, they are among the best all-around mills on the market.

The size shown herewith is popular with owners of grain elevators, feed stores and other industries allied with the grain and milling business, but having only light powers for the operation of machinery. Hundreds of these mills are in use, driven by 6 to 8 horsepower gasoline engines and similar-sized electric motors.

Circulars descriptive of this mill, as well as others in the Bowsher line, together with prices and all desired information, may be had on application to the factory.

RATE DISCRIMINATION IN MINNESOTA.

George S. Loftus, senior member of the Loftus-Hubbard Elevator Co., on January 14, made the public charge of rates discrimination by Minnesota railroads, both on grain and other commodities. Among other charges, Mr. Loftus declares that the Great Northern Railway has made a rebate agreement with three powerful line elevator companies, under which rates to head of the lakes on grain were practically cut in two. "The other roads and the Great Northern," he said, "systematically cover these rebates under the guise of 'elevator charges,' although the grain does not pass through an elevator."

Mr. Loftus gives "chapter and verse"—cites the numbers of "claims" upon which rebates were paid, under that subterfuge. In short, Mr. Loftus says: "The big shipper may obtain whatever he wishes; the little shipper must take his chances;" since this system of rebates "practically compels smaller concerns to carry grain to the head of the lakes through the agency of one of three big line elevator companies, and have barred smaller firms from certain classes of traffic between Chicago and St. Paul." He believes, but does not force the charge or attempt to prove it, that the

same rebates probably apply to many classes of shipments on which he has no specific evidence. He also alleges discriminations in the matter of switching charges.

The directness of Mr. Loftus' allegations was such that the state legislature has taken up the matter and appointed a committee to make an investigation, said committee having begun its work on February 1; and has since been engaged in taking testimony, both as to state and interstate rates from Minnesota.

IN THE LEGISLATURES.

Nebraska.—There has been introduced in the Nebraska legislature a bill for a landlord's lien law similar to those of some other states, which hold the grain dealer liable for grain purchased from tenants who jump their rent.

A bill will probably be introduced requiring railroad companies to build sidetracks for the benefit of farmers' elevators.

A bill has been introduced to class all deals in stock or grain futures as gambling, subject to gambling penalties. The fact that grain men declare the bill in the form of law would, if strictly construed, prohibit buying and storing grain for future sale, does not affect the determination of the legislature thus far. They are after the "elevator trust," and willing to go to any extent to put it out of business, even to cutting their own throats in a business way as operators of co-operative elevators.

Kansas.—A bill for a law has been introduced in the legislature to regulate transportation lines and compel better car service. It seems to be drawn with the Virginia demurrage law as a model.

A bill by Representative Grass provides that any railway company shall, upon written application, designate the place where a sidetrack may be located at any point where an elevator of not less than 5,000 bushels' capacity may be built, not more than one-fourth mile from a regular way station. If the company does not desire to do this, it shall allow the elevator to be built upon its right-of-way, and shall receive a fair compensation therefor. The bill makes the board of railroad commissioners the arbitrators between the people who want to build an elevator and the railroad companies. It is drawn for the benefit of the co-operatives.

The Senate committee on January 19 recommended the passage of a bill to abolish the state commission whose duty it has been to establish grades of grain. The only work of the commission has been to meet once a year and assist the chief grain inspector to fix the grades.

Representative Plumb has introduced a railroad bill which is modeled upon the Texas law. The nub of the proposed legislation is to take the rate-making power away from the railroads and put it into the hands of the state, operating through the instrumentality of a railroad commission to be elected just as governor and other state officers, including Supreme Court judges, etc., are elected.

Texas.—A bill has been introduced in the Texas legislature to create a state grain inspection bureau.

North Dakota.—Representative Nicholson has introduced in the North Dakota legislature a bill for a law to amend the state revenue laws to provide for a fixed rate of taxation on all grain in elevators and warehouses. If the bill becomes a law flax will be taxed one-half cent per bushel; wheat at three-eighths of a cent; oats, barley, corn, speltz and rye at one-eighth of a cent per bushel.

Representative McCrea has introduced a bill prohibiting bucket-shops from doing business in North Dakota, or the existence of any place where grain, meats or other articles are sold on margins without the intention of a delivery of the goods.

Representative Sheils introduced a bill providing for the appointment of the grain commissioner by the governor, and making it mandatory upon all grain buyers and elevators to report to him daily the exact weights and the grades of all grain bought and sold by them. This bill is designed to

in some mysterious way stop short-weighting on the part of unscrupulous agents of the elevator companies.

Missouri.—Senator McDavid has introduced in the Missouri legislature a bill providing for the inspection of hay under the direction of the Railroad and Warehouse Commission.

The Railroad and Warehouse Commission, in its annual report, recommends legislation which will enable the Commission to inspect all weights made in public elevators.

Minnesota.—Two bills have been introduced in the Minnesota legislature to prohibit speculation in grain and stocks. One bill by Representative Wells is intended to completely wipe out all buying and selling on margins, where there is no apparent intention to receive or deliver the thing purchased, and to do away with all dealing in futures. Another bill, by Representative Erickson, forbids the operation of bucket-shops, defining the latter's trades as any deals not bona fide offers to buy or sell. This measure makes it a criminal act for the proprietor to offer to make a contract for dealing in futures, whether the contract is accepted or not. The bill further makes it the duty of the commission merchant to furnish to his customer a written statement containing the names of the parties to any deal, with statement of the time, place and other matter. Failure to give this statement is held as prima facie evidence of intent to evade the law.

By virtue of a resolution introduced by Representative Hannaford a committee of seven has been appointed by speaker pro tem. of the Minnesota legislature to investigate the system of inspecting and weighing grain in Minnesota. This committee consists of the following: Representatives A. Hannaford, Monticello; H. Ward Stone, Morris; I. W. Bouck, Royalton; J. G. Lund, Minneapolis; Ole I. Opedahl, Mansfield; J. B. Kelly, Lakeville; H. T. Hille, Fergus Falls. The members of the committee were not disposed to take any action until Mr. Hannaford had made plain what he expected to do. After considerable discussion, he finally consented to say that he intended to unearth some illegal weights and inspections in Minneapolis; that proof would be given of many instances of short weights in Minneapolis; that the official weigher's figures often varied 10 bushels to the car from the figures of the farmer and shipper, etc.

Representative Hannaford has introduced a bill requiring all grain received at Minnesota public elevators to be weighed in the car on railroad track scales.

A joint resolution has been introduced by Senator Thorpe "protesting against any construction of section 30, Dingley tariff law, which would classify wheat and flour as materials or products which could be identified as contemplated by the provisions of said section 30, and we demand immediate legislation which shall exempt wheat and flour from such 'drawbacks.'" Senator Hansbrough of North Dakota, on February 3, introduced as amendment to the sundry civil bill a measure to repeal the drawback provision of the Dingley act in so far as it applies to wheat.

Wisconsin.—A bill for a law on reciprocal demurrage has been introduced in the Wisconsin legislature. It provides that the railway companies shall furnish cars within 72 hours after a demand is made by shippers and gives shippers 48 hours in which to load, prohibits rebates, and makes other restrictions.

The state grain inspection bill, defeated two years ago, was introduced in the Senate on February 3 by Senator Hudnall. The bill differs from that of two years ago only in making terms of inspectors one year instead of two and salaries \$100 per month instead of \$200. It provides for the appointment of one inspector from Dakota, one from New York and one from Wisconsin, to inspect all grain at the port of Superior, the idea being to give grain a Wisconsin rating instead of a Minnesota rating as at present.

Illinois.—The Civil Service Association's bill for a state merit law embracing all employes of state

offices and departments except the grain inspection department has appeared in the Illinois legislature. The bill provides for a state commission in charge of the administration of the law, and declares all employes, except heads of departments and other exempted officers, shall be appointed and promoted upon the basis of ascertained merit and fitness. It permits removals to be made by heads of departments for cause and without trial, except at the demand of the commission. Representatives of the grain trade will endeavor to have the bill amended to include the inspection department.

Kansas.—Senator Noftzger's bill relating to the inspection and handling of grain aims to reduce the fees for weighing grain at terminal markets within the state. Should the bill be enacted into a law, the fee for weighing will not exceed 40 cents per car, as against \$1 per car, present charges. The bill has been reported favorably by the committee on agriculture of the Senate, and will doubtless be acted on by the Senate committee of the whole at once.

Senator Blaker's bill to prevent fraudulent practices connected with the sale of grain, seeds and hay, has passed the Senate and been recommended for passage by the committee of the House. Under the provisions of this bill any elevator owner, operator, broker or agent deducting from the net weight of grain is liable to a fine of not less than \$25 or more than \$100 for each offense. This will put a stop to the deducting from each carload of 100 pounds, as has been the custom at Kansas City for years.

Senator Hodges' bill provides that when cars are loaded and B/L issued for same, the cars must go forward to destination not less than 50 miles per day of 24 hours, or pay to the shipper \$5 per day and actual damages caused by their neglect and reasonable attorney's fees in case it becomes necessary to bring suit to recover. The bill has been recommended for passage by the House.

Illinois.—Representative Farnum has introduced a bill providing for the licensing of owners of grain warehouses.

A bill has been introduced by Senator Dixon to differentiate bucket-shop from Board of Trade transactions. At present the bucket-shop law makes it impossible for the courts to distinguish between the brokerage offices conducted by reputable Board of Trade firms and establishments maintained by unscrupulous persons who carry on gambling operations under the guise of Board of Trade transactions, that is, "bucket-shops."

Nebraska.—The special committee of the House appointed under the Foster resolution providing for an investigation into the feasibility of maximum freight rate legislation, has introduced a bill fixing the maximum rate for live stock, grain, coal, etc., at a figure ten per cent less than the prevailing rates in force within the state January 1, 1905. In order to make the provision effective, the railways are required to file in the office of the secretary of state all the rates in force on that date. There are no extensive schedules attached to the bill, the purpose being to make a horizontal reduction in the figures charged on the first of the year. Another feature of the measure prohibits a charge for a short distance in excess of the charge for a longer distance.

John D. Greer will engage in the grain and feed business at Marion, Kan.

Chief Inspector Culver of the Toledo Produce Exchange has been reappointed for another year.

"The laws of compensation, so 'tis said,
Are always just,
And that 'Val' will get his deserts I fondly
Hope and trust,
But it's little consolation to a fellow
That's 'gone bust,'
And has nothing left to cheer him but a sense
Of deep disgust."

—Chicago "Short."

THE NEW YORK CONFERENCE.

On February 9 one of the most important commercial conferences held in many years took place at the New York Produce Exchange, the subject matter being the existing disorder in grain rates and the competition between the Gulf and the Atlantic ports for export grain. Besides railway and steamship officials, there were present also most if not all of the following accredited delegates from the exchanges named:

Chicago Board of Trade.—John T. Sickel, James Pettit, George E. Marcey, E. F. Glazier, James Bradley.

New York Produce Exchange.—James F. Parker, John Valiant, P. A. S. Franklin, Yale Kneeland, Frank Harriott.

Commercial Exchange of Philadelphia.—G. G. Omerly, president; C. F. Saunders, secretary; James Hancock, Charles Dunwoody, R. S. Dewees, Samuel Bell Jr., James Hay, E. Blackford Jr., H. D. Irwin.

Baltimore Chamber of Commerce.—Louis Muller, Charles England, J. Collin Vincent.

Buffalo Chamber of Commerce.—Leroy S. Churchill, S. W. Yantis, T. J. Stofer.

Detroit Chamber of Commerce.—Thomas G. Craig, Frank T. Caughay.

Boston Chamber of Commerce.—James Eddy, Charles P. Reed.

Toledo Chamber of Commerce.—President Southworth.

The opinion of the Eastern men was that the fight between the two routes for grain would be "fought to a finish." So far as the break in rates affects the Western grain trade, George E. Marcey of the Armour Grain Co., Chicago, who gave an account of the conditions leading up to the active Gulf competition, said in part:

We have all seen the Gulf export grow to the detriment of the Mississippi River crossings and the Atlantic seaboard, and up to the present time, apparently, none of the railroads or grain people who have worked on the matter have been able to figure out a plan whereby this unfair advantage in favor of the Gulf can be overcome in a practical way. Heretofore, whenever the lines from the Missouri River to the Mississippi River crossings attempted to fight the Gulf roads they could not possibly succeed. Their rates from the Missouri River to Chicago, for instance, would be 11 cents per hundredweight, and this was all the line between the Missouri River and Chicago had to play on in case of a freight war. The Gulf roads could cut down to a figure that this rate of 11 cents is absolutely eliminated every time a fight was started in this direction; thus the Chicago-Mississippi River roads had to give up and each time the Gulf lines became stronger and stronger. At times the lines from Chicago east would take it upon themselves to start a fight in attempting to protect the suffering Atlantic seaboard against the Gulf. These fights were of short duration, as the Eastern roads would soon exhaust all their ammunition, consisting of from 12 to 15 cents per hundredweight, and then give up.

A few months ago the Chicago Board of Trade secured the services of Mr. E. B. Boyd, a practical railroad man, who, from the standpoint of representing a large railroad with Gulf as well as Chicago connections, had thoroughly studied the situation. He, with some of the prominent railroad officials, evolved a plan of causing a joint rate to be made from the Missouri River to the Atlantic seaboard, the roads east and west of Chicago and St. Louis to divide the rate according to an agreed percentage. At a joint meeting of the Eastern and Western roads the proposition was finally accepted. The Eastern roads gave the authority to the Western roads to name whatever rate they saw fit in order to protect the Atlantic seaboard against the Gulf. A percentage of 60 per cent to the Eastern road and 40 per cent to the Western road was agreed upon, and a plan was finally worked out, against which the Gulf roads could not pursue their original tactics. At about this time the rates in force were as follows:

Kansas City to the Gulf, 17 cents per hundredweight, including fobbing. Omaha to the Gulf, 18 cents per hundredweight, including fobbing. Rate from Kansas City and Omaha to Baltimore, 22½ cents, but did not include fobbing at the Atlantic seaboard.

These rates gave the Gulf an advantage over Baltimore of 5½ cents from Kansas City and 4½ cents from Omaha. In addition to this, the Gulf had an advantage of the fobbing being done for the Gulf shipper, with no expense, whereas the Atlantic seaboard exporter paid from 1½ cents to 2 cents per hundredweight for fobbing, thus making the differential, as a matter of fact, from 6 cents to 7½ cents per hundredweight. Against

these differentials it was absolutely impossible for the Atlantic seaboard to compete.

While Chicago and the Atlantic seaboard were struggling trying to obtain relief against the already impossible conditions, the Missouri Pacific road put in some midnight tariffs from Omaha to foreign ports. These rates, on the basis of the ocean rates which were ruling at the time, show that the Missouri Pacific had apparently reduced the rate between Omaha and the Gulf from 18 cents per hundredweight to in the neighborhood of 14½ cents per hundredweight. This reduction was so great as to not only draw all the corn from Nebraska and Kansas, but it caused the price at Omaha for grain to reach such a figure that, instead of Western Iowa grain being able to move eastward, as it has ever since grain has been grown in that state, it turned around and backed up into Omaha. These prices made at Omaha caused the grain to move to that city and then to the Gulf from points as far east as Des Moines, or in the neighborhood of 150 miles east of Omaha.

This cut on the part of the Missouri Pacific was the last straw. The roads running from the Missouri River to Chicago without Gulf connections figured that the time had come when they had to fight for their lives, so that when the joint arrangement was made between the Eastern and Western roads the fight started. The Chicago, Milwaukee & St. Paul and Chicago Great Western roads, who could not possibly make a Gulf connection, were the leaders. The Rock Island road soon followed. The officials of this road came forward with the bold statement that they had a line to Chicago and were going to protect it against the Gulf; that, in their opinion, not to exceed a 3½-cent differential should be allowed the Gulf between Missouri River points. On top of the Rock Island's strong indorsement, other roads soon put in reductions, and to-day the Chicago-Atlantic seaboard lines have a rate east of 11½ cents to Baltimore, whereas the rate from Omaha to the Gulf is 11 cents per hundredweight. This differential of ½ cent is figured by the railroad officials as being proper, the difference in the f. o. b. charge of 2 cents per hundredweight, which is paid by Gulf lines to the operators of elevators at Gulf ports, and the intermediate transfer charge of 1 cent per hundredweight, which is said to be paid, making a 3½-cent differential. On this stand which the Western roads have taken in quoting these rates it is an extremely pleasant thing to see that they have been encouraged and strongly indorsed by a number of Eastern railroad officials, who have begged the Western roads to keep up the fight and not give up until an equitable adjustment has been arrived at. The Gulf roads are in a very undesirable position. Take the Illinois Central, for instance, on an 11-cent rate from Omaha, it is cut into two parts. The road carrying grain to Centralia receives 5½ cents per hundredweight, leaving the Illinois Central 5½ cents per hundredweight. Out of this the Illinois Central pays a terminal charge for the unloading of their grain of 2 cents per hundredweight, leaving 3½ cents. Out of this 3½ cents they must pay a bridge toll of 2 cents per hundredweight, and the balance they get for a haul of nearly 700 miles.

The Atlantic seaboard to-day stands in a better chance of obtaining an equitable adjustment than they ever stood before. It is simply a case of Chicago-Mississippi River gateway roads and the Atlantic seaboard roads standing firm and insisting upon their rights. Each exchange should perfect a strong organization, bringing into it all the local influence possible, and applying all this influence on every railroad official from the chairman of the board and the directors down that it is possible to approach. All should work night and day and insist upon fair play before settlement is made.

President Southworth, of the Toledo Produce Exchange, announced that his association had not appointed a committee to be present because theirs was a rather neutral territory so far as the Atlantic and Gulf were concerned.

John T. Sickel of Chicago presented figures showing that, while New Orleans from 1900 to 1903 had 15 or 20 per cent of the grain exports, it was now getting about 41 per cent.

After much discussion James F. Parker, chairman of the Produce Exchange Committee on Trade and Transportation, offered tentative resolutions which, after slight amendments, were enthusiastically adopted. They follow:

Whereas, The interests vital to the existence of the grain business in the middle Western markets and the Atlantic seaboard are being jeopardized by the course of the Southwestern railway systems in introducing unreasonably discriminative rates of freight from the territory directly tributary to the points of accumulation and distribution in the West;

Whereas, The very life of the interior markets, and the life of the Atlantic ports as ports of shipment, and indirectly even as ports of importation, is being sapped by this unjust and persistent deter-

mination to divert to the Gulf ports the business which is natural to the middle Western markets, thereby causing an alarming decrease in the volume of business passing through our respective ports of shipment;

Whereas, As a consequence of this, the business with foreign markets of Eastern receivers, importers, exporters and steamship companies, which has taken years to establish, is now being arbitrarily wrested from them, many of our large merchants having been forced to withdraw their capital and support to our markets and driven to direct their energies and financial strength to other channels;

Whereas, Some of the Western roads and the trunk lines running to the Atlantic seaboard are endeavoring to check this unnatural diversion of our supplies by meeting this unexpected and unusual competition; therefore, be it

Resolved, That this convention, composed of a large and prominent representation from Chicago, Milwaukee, Toledo, Detroit, Buffalo, Boston, New York, Philadelphia and Baltimore, does hereby express its appreciation of the timely action of these railroad companies, and takes this method of assuring them that the many important interests herein represented have confidence in their ability of meeting this competition, and heartily indorse their present attitude and hereby pledge their united support;

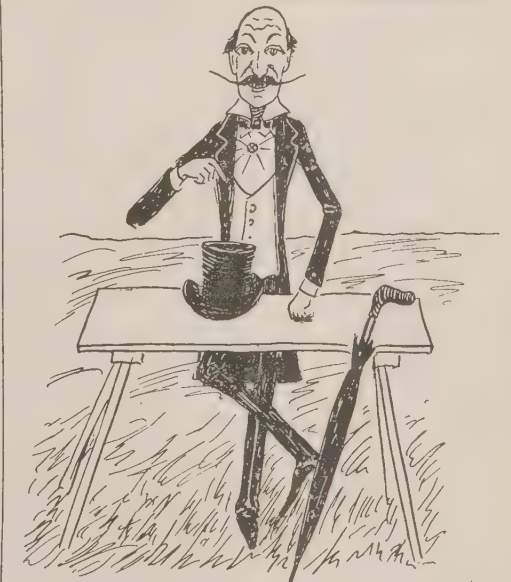
Resolved, That the several Western and Eastern roads be earnestly urged to continue to protect the large interests that are dependent upon them for the maintenance and continuance of the many different lines of business and traffic involved until an agreement is arrived at that will restore and in the future preserve to the middle Western and Eastern markets the business that they have established and are entitled to, and which is now being so seriously menaced by unjust discrimination;

Resolved, That each commercial body represented here be requested to appoint one member to compose a standing committee to be charged with the duty of agitating this question, and, in conference with the railroad companies, further the interests for which this meeting is called;

Resolved, That a copy of these resolutions be sent to the presidents and traffic managers of the different railroads whose interests are affected by this Gulf rate discrimination.

The delegates from the interior strongly indorsed the current agitation. Mr. John T. Sickel of the Chicago Board of Trade's committee said that if there was one part of the resolution that should be featured it was that the railroads should continue their present efficient attitude. Gulf competition, he said, had been going on for many years, but it is only within the last twelve months that it had become a live issue. A great battle was still ahead.

Detroit bucket-shop busted yesterday. Next? It had numerous branches. There are others. Toledo has five, against only one a few months ago. The cancer spreads. Chicago Board of Trade is waiting for a United States Supreme Court decision. Better push it along.—King & Co., January 21.



Is the Wheat still under his (Wall Street) hat? We all saw (or rather believe) 10 to 15 million bushels May wheat was put there by the Wall Street party. Is it there now? If it is, what'll be the outcome.—Zahm's Circular.



PUBLISHED ON THE FIFTEENTH OF EACH MONTH BY

MITCHELL BROS. COMPANY
(INCORPORATED.)

OFFICE:

Manhattan Building, 315 Dearborn Street,
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Subscription Price, - - - \$1.00 per Year
English and Foreign Subscription, - 1.60 " "

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This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

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We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., FEBRUARY 15, 1905.

Official Paper of the Illinois Grain Dealers' Association.

THE PRESIDENT IN EARNEST.

Although New York is a chronic sufferer by rate wars, her business men let no occasion pass to raise objections to any proposition to secure stability of rates by legislative control of the carriers. It was, therefore, a characteristic act for the President to go to New York to give voice to his views on the railroad regulation problem. The Union League speech controverted absolutely the familiar New York doctrine of the inviolability of vested interests in any way and under all circumstances.

It may not be literally true that, as the President said, the framers of the Constitution contemplated federal control of interstate commerce "in all its branches and aspects." The present transportation problems could not have been conceived of by "the fathers." But the President's argument that the doctrine of laissez faire has lost its force and justification is unanswerable. It is the abuse of their opportunities by the carriers that has brought this to pass; and now the unrest created by this abuse has taken possession of the long-suffering, conservative middle class, upon whose content depends the social and political stability of all civilized nations.

The President voices, too, the manifest purpose of this middle class to secure now a proper control of the transportation facilities by acting through the government. The problem is to secure this control by avoiding quack remedies; and the President, in the very house of the opposition thereto, tells these New Yorkers that the way to avoid radical change is to consent to moderate change. Transportation management has brought about a condition that makes federal control imperative—power over rates and the details of the service

must be lodged in some tribunal which shall direct transportation matters not in the interest of any class, but for the good of all. The people will be content now with nothing less.

CIVIL SERVICE IN ILLINOIS.

The civil service bill, as introduced in the Illinois legislature, for some occult reason, omitted the grain inspection department from the operation of its compulsory merit system. Of course, the late chief inspectors, "Ed." Noble and "Joe" Bidwill, used to say that a law was not necessary—the department would be good without pressure. However, the raids during the past six weeks upon the Bidwill family, sometime employes thereof, not to mention the assault and battery on himself, have probably shaken Mr. B.'s confidence in the angelic disposition of the department when going through a change of administration, as they have made it clear to all others that the politicians still control and use the department for their own purposes. Isn't to-day a good time to put an end to this system?

It ought to be apparent now to farmers that they are the real losers by the severity of the "in" inspection and to the great consuming public that the "out" inspection is no longer a fair arbitration of the merits of a delivery on warehouse receipts or purchase of grain at Chicago; that both inspections are conducted solely in the interests of a class of public elevator operators and speculators. Now, it is not a certainty, of course, that the merit system in the department would result in a correction of the abuses complained of; but it is the first step in that direction, for it would give permanence of position to capable men and would tend to operate just as the merit system does in the weighing department of the Board of Trade, which does insure an honest arbitration of the weight factor of all trades in grain in this market.

It is up to the grain men and farmers all over this state to force this reform on the grain department. The Governor is with them this year; and the merit system can be had if those directly interested in it go after it in dead earnest.

THE TRACK SCALE AGAIN.

A Minnesota legislator, who has been introducing bills and resolutions at a rate to indicate his desire to reform everything in sight in a single session, brings in one to provide that all weighing of grain at the terminal markets of that state shall be done on track scales. Without trying in any case to be exhaustive of the subject, the official weighers who have favored the editor with their views on this question are practically unanimous that unless the track scale is erected in the most substantial manner and is operated under the most favorable conditions, it is practically worthless as a weighing instrument. These opinions, which are entirely disinterested, as we have every reason to believe, should utterly demolish this badly-conceived movement in at least two states to get rid of one system, however imperfect, in order to substitute for it a worse one.

The trouble with hopper-scale weighing is

not with the scale but with the men who use it. Now it ought to be easier to get reform by substituting honest men for thieves at the scales than to try to make a bad machine do the work of a good one—with the same set of thieves operating the bad machine, if we must put it in that way. Which we do not, by any means. The records of terminal shortages show that the average shipper is too careless at home to get an out-turn at the terminal equal to his own weight on any kind of a scale. And his disposition to slovenliness cannot be cured by laws substituting track scales for hopper scales.

KEEP AN EYE ON IT.

A bill has appeared in the Illinois house to provide that the Railroad and Warehouse Commissioners shall appoint public weighers in all cities where there is state inspection of grain and fix their fees. As the law now fully covers this matter, this bill by Representative McKenzie has a sinister aspect. It can be of no benefit to the farmer and none to the country grain dealer. It looks like an attempt of the Warehouse Commission to overturn the existing weighing system at Chicago by underhanded methods, and do by indirection what they did not dare do directly.

Apparently, unless the bill has some unseen merit, it is a good one to keep an eye on. The Railroad and Warehouse Commission's handling of the inspection and of public weighing at East St. Louis is not of a character to make one anxious to see them in control, even indirectly, of the weighing of grain at Chicago.

GRADING WHEAT BY MILLING VALUE.

Since certain scientists in Canada discovered (?) that good bread could be made of flour from low-grade wheat, it has been a favorite demand of Canadian farmers, and others on this side the line, that the money difference between the established grades of wheat is too wide; and they say they are disposed to demand that unless the difference is narrowed they shall ask for the abolition of the entire inspection and grading system and require that wheat be sold "by sample according to its milling value."

Farmers who know anything about milling and the actual milling value of low-grade wheats will never agree to any such folly—for them; for, as Mr. Anderson, a miller at Noblesville, Ind., has recently demonstrated, the price spread between the various grades of wheat, as made by the inspection rules, is never as great as it should be. It has, in fact, but slight relation to actual milling values. The farmer who understands the matter as well as the shrewder millers do, knows very well that the money he does get for his low-grade wheat is out of all proportion to its actual cash value to the miller, which is based directly on the weight of the grain. It is the flour that weighs in the mill, and the heavier the wheat the more flour it yields; the lighter the wheat the less flour and the more bran in proportion.

The farmer gets a disproportionate price

for his low-grade wheat, not because that price approximates its milling value, but for the sole reason that the elevator man, or grain dealer who sells to millers, is able to use it for diluting desirable (heavy) milling grain by a system of sophistication, the ill effects of which fall wholly on the miller and which in just that proportion benefits both the farmer and and the mixer who sells to millers.

RAILROAD RATES ON GRAIN.

The very imperfect attempt, in its proper department, to give the reader a view of the current grain rate situation, that can be of any practical value to him, is admittedly a failure. The meeting of exchange representatives at New York, on February 9, has, perhaps, laid the foundations for a settlement, in which the rights of the Gulf ports to their proper share of the corn traffic and no more will be recognized and adjusted. The Eastern railroad magnates have doubtless discovered by this time that they cannot arbitrarily put those ports off the map and make them "stay put," any more than the Gulf lines can permanently hope to eliminate the Atlantic ports from the export trade. This natural and inevitable contest between out-ports must be adjusted on a rational basis; and the righteousness of such an adjustment in the public interest, by agreement between the lines interested, will not be questioned by business men.

But no such settlement has as yet been made or announced; and in consequence the rates in the entire corn zone are uncertain quantities. Good advice to the shipper would be to keep in touch with your commission man, who will advise you to which market you may most profitably ship for the time being. Here is seen the value of harmonious and confidential relations with your commission man, who, if he is of the right sort, will protect your interests in all emergencies, even if, as may happen now, he may lose your business during a brief period of abnormal conditions.

THE INDIANA RAILROAD SETTLEMENT.

The Indiana Grain Dealers' and Indiana Shippers' Associations have won a signal victory in their campaign for a law creating a state railroad commission "with power." But more remarkable than this success is the moderation displayed by their representatives in their moment of triumph. Mr. Riley, in a letter on page 430-31, tells the story how the representatives of the shippers and of the railways met and agreed upon a bill that would be fair to both sides and have united to urge its passage through the legislature. That Indiana shippers might have dictated terms to suit the most radical views was apparent; that they acted in a conservative manner, even while remembering long years of studied indifference to their rights by the railroads, is a sufficient answer to those who would have us believe that state railway control for the protection of the rights of the shipping public means, or is believed by sincere railway men

themselves to mean, invasion of the legitimate rights and privileges of railways considered as private property.

THE HOUSE ACTS.

Speaker Cannon, at the National Board of Trade banquet, on January 17, was rather disposed to assume the attitude of the superior congressional person who thinks this "talk of an interstate commerce law" is rather superfluous—there "is already legislation enough;" but by the time the party caucus was held early in February on the Esch-Townsend bill, Mr. Cannon admonished the members present that the House "must pass a bill" and at this session. So much for the influence of militant public opinion squarely directed upon the House.

The Esch-Townsend bill, as passed by the House, amounts to nothing except to remind the public that the House so far yielded to the anti-reform influences in Washington as to set aside the Cooper-Quarles bill, which had been prepared with great care by the most conservative of the reformers and represented something definite, simple and practicable, without multiplying bureaus or barnacles, and substituted therefor a bill concocted with extreme haste, a patchwork of three bills, confessedly imperfect and of doubtful validity—a bill to pass and thus save the face of the House, which well knew the Senate would not concur in it. The bill has 22 sections and provides in brief that—

the Interstate Commerce Commission shall have the power, when a rate is complained of as unfair, to fix another rate which is to go into effect after thirty days and remain in effect unless reversed by the courts. For the adjudication of such cases it is provided that a special court of transportation shall be created, to have jurisdiction over all suits arising out of the effort to fix rates. This court is to have power to enforce or restrain the Commission's orders, but in reviewing the case it is to accept the Commission's findings as prima facie evidence of the facts.

The passage of the bill is an impotent concession to the public demand for railway reform, which has become so imperative that the House dared not resist, however imperfectly it responded to that demand. The bill will be lost between the ends of the capitol; at least, the Senate will never concur in it—probably never will even consider it, or any other bill, for the present. The real problem now before the shipping public demanding reform is how to get action in the Senate; for, of course, the House may now be depended upon to concur in any bill that the magnates and railway representatives in the Senate shall graciously incline themselves to grant the shipping public.

INCREASING FIRE LOSSES.

With the fire losses increasing from \$160,000,000 in 1903 to \$170,000,000 in 1904 (not counting \$80,000,000 loss at Baltimore and Rochester), business men may well stop to ask how far this alarming increase of property destruction is due to the methods of insurance companies themselves. Undoubtedly the companies give much attention to the matter of

loss prevention, but in the light of results it is by no means certain that it is as efficient or productive of results as the attention they pay to rates and increasing their business. The statements of the mutuals at least for 1904 show no such proportionate increase in losses. As the public, even those patronizing the mutuals, must pay their share of the indemnity of these enormous losses, this question of fire prevention and insurance company relation thereto is becoming a serious one. Unless there be reform soon insurance will be a business luxury attainable by the few only.

NATIONAL BOARD OF TRADE.

The National Board of Trade meeting at least gave the Eastern delegates an opportunity to lay bare their ignorance of, if not indifference to, public opinion on the question of commerce law reform. The persistence with which the speakers on the question from New York and Washington misrepresented the demands of the West suggests a motive not wholly ingenuous. It is gratifying to know that the Board favored rate supervision by the government, even if it did approve of "pooling" and the ship subsidies.

But isn't the Board just a little too diffusive? A body that in four or five brief sessions undertakes to dispose of agenda numbering eighty items, covering the widest possible range of subjects and interests, all requiring for their proper consideration and disposal the very highest order of expert knowledge, is in danger of inviting suspicion of its wisdom. Its latest meeting, at any rate, gave evidence of perfunctoriness in the treatment of several topics.

DECISION IN THE HAY CASE.

Judge Wing's decision at Cleveland in the "hay case" was hardly a surprise, however disappointing it may be. It is long since the Commerce Commission attempted directly to influence rates; and the Commission's order upon the roads in official classification territory to reduce hay to its original, or sixth, class, which the action sought to sustain, was but ordering indirectly a reduction of rates. The Commission having no power to make such an order, the Federal Courts have no power to approve, amend or modify the said order so as to render it effective as against the defendant roads which have refused to acquiesce voluntarily in the order.

But the decision again exposes the impotence of the Commission and its reduction by the courts to the status of an ornamental appendage to the Department of Commerce and Labor, of which naturally it ought to be the most forceful factor. As the arbitrary change of hay from the sixth to the fifth class summarily raised the rate from \$1 to \$1.10 per ton with no betterment of the service in any respect, and was without justification in the nature of the traffic, the new classification was a typical case of railroad unfairness and greed, which in a pre-eminent manner emphasizes the need of legislation looking to national supervision of railway rates and service.

EDITORIAL

MENTION

Suppose the Commerce Commission again approves the Baltimore-Philadelphia differentials and the railroads do not—what's to be done about it?

The Christie bucket-shop crowd at Kansas City are going to try the wireless telegraph for transmitting quotations. But what's the use of transmitting any quotations? A bucket-shop does not really need them except for the sake of appearances.

Quite a number of the states have before them bills to suppress the bucket-shop; which is all well and good, but the bucket-shop will never cease to be a public plunderer until the federal government puts it in a class with the lottery and suppresses it in the same way.

Option trading is getting to be the nemesis of the co-operative elevator company. The agent is "sporty" and so, too, is the farmer—when it pays. But there is danger that when the losses pile up too high the directors may try to get even by denying the authority of the agent.

The allowance of $2\frac{1}{2}$ cents a hundred to a terminal elevator for unloading the operator's own grain is manifestly a "rake-off" from the rate: for the country elevator man, with his simple machinery, has to handle grain through his house, including his profit, for but little more than that amount.

Those who are disposed to favor the track scale in preference to the hopper scale for weighing their grain may be interested in knowing that on January 12 last the Chicago Weighing Department had to get out steam engines to thaw the ice off a number of track scales before business could proceed.

It now is explained that the "midnight" tariff" was necessary to enable one big shipper to compete with another big shipper who gets the benefit of the elevator charge for unloading his own grain. This "elevator charge" allowance is going to play havoc with any proposition for a "square deal" in rates that can be devised—without eliminating this allowance.

The new commercial treaties negotiated by Germany largely increase the German duties on corn, rye, wheat and barley, which go into effect on February 12, 1906. This is another concession to the insatiable agrarian interests of East Prussia, where an inhospitable soil, unfavored by nature, must be compensated by taxation of the remainder of the Empire, because it so happens that the "pull" of the agrarians in Prussia is simply overwhelming. This "bread usury," as Herr Bebel has called it, is one more effort, that will no doubt prove ineffective, to help Germany supply her own

breadstuffs—an economic fallacy well enough understood in Germany by those powerless to prevent it.

By dint of expert testimony of country millers and others, the farmers of the Northwest have convinced Judge Lochren at St. Paul that frosted wheat is, practically speaking, sound and merchantable grain that will make good flour and will germinate. He has therefore ruled that such wheat, when imported, must come under the customs rule as sound grain and pay 25 cents per bushel duty.

Boston—even Boston—in December developed a corn squeeze, in which Mr. A. Fred Brown did the squeezing. Divers and sundry gentlemen had sold him quantities of corn, of which on December 31 they were short some 400,000 bushels. "In order to protect my interests," Mr. Brown thereupon bid the price up from 55 cents to 75 cents. Then the squeezed appealed to the directors. Sounds familiar, doesn't it?

At a meeting in Washington in January of representatives of the National Hay and Grain Dealers' National Associations the proposition to consolidate was discussed. Naturally no result was obtained, the organization of the two associations being different—the one being an association of individuals, the other of affiliated bodies and individuals. Perhaps, however, the last has not been heard of this proposition—who can tell?

Bills providing for the inspection of grain in Texas by state appointees and of hay in Missouri by the Railroad and Warehouse Commission are opposed by the grain and hay interests of both states, as they should be. There is no valid reason for state interference in matters that are strictly concerns of private business. In Texas more especially it is difficult to see how a purely local inspection could serve any good purpose or be worth its cost.

The congressional free seed distribution seems still to interest the public as a matter open to reform. But reform is hardly to be expected. Congress rarely gives up any privilege except under strenuous pressure. However, now that so distinguished a senator as Mr. Lodge of Massachusetts has made an attack on the appropriation and the House has refused to enlarge it beyond \$200,000, there is hope that this miserable farce, worthy of no one, may some day come to an end.

Secretary Coburn's fourteenth biennial report of the State Board of Agriculture of Kansas has appeared—a splendid volume of 1,044 pages and 175 illustrations. This paper has frequently in past years had occasion to express its admiration of Mr. Coburn's work as an agricultural mentor, and the present summary of two years' work in no wise lessens that appreciation. Mr. Coburn is a man of broadest views and distinctly modern in everything; but, as becomes an official of the state of Kansas, his work is severely restricted to what conserves and advances the agricultural estate of Kansas; and in that view one

can hardly imagine a more admirable volume to put into the Kansas farmers' hands than this report, and yet farmers generally of the Mississippi Valley would welcome it, were it available to them, with open hands.

The National Union of Farmers, another Indianapolis aggregation with branches in Minneapolis, recently forwarded samples of a lot of wheat to Minneapolis, the sample bag bearing a union label and accompanied by an offer to sell the "union label" wheat at a minimum of \$1.20 per bushel. The commission houses have recovered from their immediate shock; but think that when wheat begins to wear a union label it's time for some other folks to get busy.

The most conspicuous failure of the Illinois Railroad Commission to satisfactorily adjust differences between the carriers and shippers is the failure of the Commission to put into effect the 25 per cent reduction in rates ready to be promulgated two years ago. Politics, however, interfered then; and now the Commission finds itself before the bar of the house and asked to explain. Appointive commissions by politician-governors have their failings, but those of Governor Yates seem to have been about the limit.

"All reports from the farmers' elevators are not so rosy as they were," says the Sentinel at Pontiac, Ill. The El Paso Elevator Co. in January reported a loss for 1904 of \$2,400; and at Savoy the Savoy Grain and Coal Co. has leased a house that cost \$16,000 to private parties. At Kensett, Iowa, the Farmers' Elevator Co. has advertised for bids for its house, the company being embarrassed by the option speculations of its officers. Being their "own bosses" seems sometimes to be expensive, however pleasant.

The Tennessee legislature has a reciprocal demurrage bill before it, as have those of Michigan, Nebraska and Minnesota. In the latter state the roads are making a strong fight against the bill, but at committee hearings the shippers, through Mr. Loftus of St. Paul, have presented a forceful array of facts to show such a bill is needed. In the struggle for a commerce law at Washington many shippers have forgotten for the moment the reciprocal demurrage question, which is likely to be heard of more from now on in the several states.

The Merchant Marine Commission has recommended a subsidy as its solution of the shipping problem. That was expected from the character of the testimony taken, which, so far as the writer followed it, was almost entirely ex parte. Nevertheless the Commission did not have the nerve to make it direct. The bill defies the analysis of any but a shipping expert, but it will penalize foreign ships by a discriminating tonnage tax and pay the sums thus realized, and more, to the American ship owners. Of all forms of subsidy this is about the meanest; and worse than all, it will not contribute in the minutest way to facilitate the sale of American farm products abroad, but rather

will interfere with their sale, for it is not conceivable that the nations whose shipping is overtaxed will let pass any chance for reprisals in kind.

Some of the newspapers say that according to the report of the Illinois State Board of Agriculture, corn growing costs the Illinois farmer as much per bushel now as it did in 1860—that modern ideas and modern machinery and better seed have had no effect in this direction. The farmers, if this be true, which may well be doubted, ought to be ashamed to let the fact be published; for of all producers they then must indeed be the most backward in intelligence.

It now appears that the uniform bill of lading, the promulgation of which has twice been postponed, is to be entirely abandoned both East and West. This conclusion was arrived at on January 24 at New York at a conference by Levy Mayer and John M. Glenn of Chicago and Messrs. Patterson of the Pennsylvania lines, Brownell of the Erie and Chairman Firth of the bill of lading committee. This was the first triumph of the force of public opinion; the passage of the Esch-Townsend bill was the second; the surrender of the Senate will be the third.

A miller in Kansas who asked his railroad to change a switch for him, on being denied, appealed to the state Railway Commission, where the road defended itself for its refusal on the ground that the shipper had been guilty of repeated underbilling of his cars, loading flour on the bottom, covering it with bran and billing the whole as bran. A decision had not been entered at our last information; but how a man guilty of such bad faith with the carrier (to say nothing of the legal aspects of his conduct) could hope for decent treatment is past understanding. Nerve of that strenuous type hardly needs encouragement.

Another Ohio grain dealer has "discarded the bushel and prices grain by the hundred-weight." The gentleman has discovered that the practice is "coming into general use on the Pacific Coast." Will he grow a pigtail because they are "coming to be plenty" in the same neighborhood? Of course, 100 pounds are always 100 pounds, but are not also 56 or 60 pounds always 56 or 60 pounds? And who wants to handle 100 pounds for the same price he would 56 or 60 pounds? Except to "put on airs" as being able to be unique, where is the gain of throwing away two-thirds of one's profit?

Senator Burton of Kansas has been lucky enough to get a new trial, not because the court considered him not guilty, but because he was found guilty at the wrong end of the line—at St. Louis instead of Washington. The legislature of Kansas, when the decision was announced, invited him to resign, but Burton was not in the mood, nursing the idea, perhaps, that as time passes the Senate, having been easy on Mitchell of Oregon, will be more easy and let him occupy his seat again; for,

after all, the difference between Burton and other senators, as Burton thinks, is one of degree—Burton having been caught at it.

Mr. Robert Meighen, as a big miller, may be able to see justification for an export duty tax on Canadian wheat going to the United States; the exigencies of a private business may affect the eye-salve most mightily, but Mr. Meighen would have to return to the mediæval Spanish economic theories of bullion to find company. And Mr. James Carruthers is evidently more closely in touch with opinion on the Canadian West farms for he said in reply to Mr. Meighen that, "Just talk export duty to the farmers of the Northwest, and you'll have a revolution." Canada is nursing some very queer economic ideas in these days, but Mr. Meighen's is the limit.

The Iowa Supreme Court has overruled the United States Supreme Court in a matter of opinion on fire insurance. P. F. Dalton began suit at Le Mars, Iowa, asking the court to reform the contracts of ten insurance companies so as to show consent for concurrent insurance. He had been the mortgagee of a \$15,000 stock, which burned, the insurance companies seeking to avoid payment on the ground that there were parties at interest whose interests did not appear, and that the policies were not concurrent. The court held that the agent placing the insurance was familiar with the condition of affairs, no matter what appeared in the policy. In which opinion the court differs from the United States Supreme Court in *Northern vs. Grand View*.

The United States and Canada have agreed to create a joint, or international, waterway commission, whose duty it shall be to have supervision of the canals operated between the Great Lakes. It seems there are not infrequent causes for friction between the two countries which the chauvinism of certain formulists of public opinion on either side the line might fan into an unpleasant flame of discord, especially with reference to the rival canals at the Soo. It is to be hoped the patriots of the United States Senate who have so far declined to ratify all efforts of the state department to make arbitration treaties will not interfere with this peaceful overture. The Senate's laudable spirit of willingness, like the late Artemus Ward, to sacrifice all their "wife's relations on the altar of their country," has its limitations.

"We are interested in your paper, the 'American Elevator and Grain Trade,'" say S. Bash & Co. of Fort Wayne, Ind., "and are free to say that it takes the part of the people who are deeply interested in the present railroad controversy. It is evident that your paper is not owned and controlled by interests that would compel you to take a prejudiced view of present conditions." The editor greatly appreciates this word of encouragement, and would only add that it is this paper's aim to be entirely fair in this and all other controversies between the grain and hay trades and the carriers. The fact is appreciated that the time has come for a change; the only

question is the nature of that change. Shall the conservative forces on both sides agree upon a national railway law that shall give a "square deal," as the President puts it, to both carriers and shippers, or will railway stubbornness drive the conservatives into the ranks of the radicals and so spoil everything?

The Northwestern Miller broke out recently with one of its characteristic attacks upon the Chicago Board of Trade in particular and the system of speculation in grain in general, on the plea that, "The interests of the milling industry demand that a check should be placed on the counterfeit wheat market." This is thrashing over old straw, of course, and is not to be taken too seriously; but it must be confessed that the manipulation of the wheat market by the rich professional "milkers" during the past weeks has not been an edifying spectacle. But if men will deliberately put themselves in the way of those who they have every reason to know purpose taking their hides off from time to time, who is to blame? What with the severe "in" inspection and the sloppy "out" inspection, the Chicago speculative market is little short of a perpetual motion wool clipper; but how can this be stopped, Mr. Miller?

A German expert, writing upon the conditions accompanying the storage of grain, says that—

when the temperature outside is greater than inside close the windows of the granary. This must be done also when the hygrometer indicates an excess of moisture in the atmosphere. Grain in sacks has a tendency to absorb more water than that stored in boxes. When the outside temperature sinks this tendency is increased. Grain containing as much as 14.5 per cent of moisture in the damp months will still take up more. It is then liable to become heated, and produce mildew. Corn stored in iron is the least affected. When dew is falling, the windows must be closed. To sum up the matter, the best manner of storing grain is in iron shafts, because it is then affected least by the outside temperature. If, however, the corn is very damp then the barn is to be preferred.

The quotation is suggestive of the question, among others, how far the American practice of shipping grain in cars admitting of free ventilation by end openings is the best way. This is the usual practice; but it may well be asked if dry grain would not under such circumstances absorb from the atmosphere a detrimental amount of moisture, and whether in shipping a dry grain it would not be preferable under all circumstances to make the ventilation as slight as possible, especially in the fall, winter and spring months. It is well known, too, that cold grain exposed to a warmer atmosphere will instantly be coated kernel by kernel with moisture condensed from the atmosphere while moving. Why will not then the surface at least of a car of cold grain absorb moisture in the same way in transit, atmospheric conditions favoring? And would the amount of moisture a car of slightly damp corn might lose by atmospheric absorption justify the risk of its absorbing more by free ventilation should a change of weather occur while in transit? The editor would be glad to have this matter discussed by American experts.

TRADE NOTES

Edwin Lee Heidenreich, Chicago, has filed a petition in bankruptcy, with liabilities of over \$34,000.

Handy desk calendars have been received from McCord & Kelley, grain and hay dealers, Columbus, Ohio.

Seeley, Son & Co. of Fremont, Neb., are getting out plans for and have work started on the Updike Elevator at South Omaha.

The Marseilles Mfg. Co. of Marseilles, Ill., has recently purchased a three-story brick building near its plant to accommodate the constantly expanding business. The company has also installed a 200-horsepower steam plant to be used when the water power is not sufficient.

The Grain Storage Construction Co., recently organized under the laws of the state of New York, with headquarters at Buffalo, is a new company that has engaged in elevator construction work. The company is equipped to build fireproof grain storage plants and makes steel grain tank storage a specialty.

The Steel Storage and Elevator Construction Co. of Buffalo, N. Y., are sending out a booklet on the subject of steel tanks for grain storage. The booklet is not a large one, but it contains considerable information of value to the man who contemplates improving his grain storage. A copy may be had for the asking.

The firm of L. Buege & Co., elevator builders of Minneapolis, have dissolved partnership and gone out of business as a firm. H. G. Bushnell will do business in the old location as the H. G. Bushnell Company. It is understood that Mr. Buege will also continue in business on his own account. His present address is 624 S. Fifth St., Minneapolis.

The Jeffrey Manufacturing Co. of Columbus, Ohio, have published a special bulletin showing the installation of Jeffrey coal and ash handling machinery at the power plant of the Scioto Valley Traction Co., Reese's Station, Ohio. This is one of the most novel installations of its kind in this country and has attracted a great deal of attention from engineers and others.

One of the claims made for the Richardson Automatic Scale is that with the scale beam absolutely balancing with 500 pounds at either end a silver half-dollar will decline the scale one way or the other. Of course, a scale so finely adjusted must be perfectly accurate on weights. William E. Smith, Chicago, sales agent, with offices at 47 Plymouth Place, is prepared to furnish grain men all required information about the Richardson.

James J. Pollard has recently succeeded Arthur Croft, representative in central territory of Sprout, Waldron & Co. of Muncy, Pa. Mr. Pollard has been for the past twenty years with The Wolf Co. of Chambersburg, Pa., filling the successive positions of salesman, draftsman, shop superintendent and manager. As representative of the Muncy firm he will look after the wants of the trade in Northern Indiana, Northern Ohio and Southern Michigan. He will make his headquarters at Toledo, Ohio.

The business heretofore conducted under the style of the Kay-Pim Mfg. Co. at St. Louis, Mo., is now controlled by the Kingsland-Kay-Cook Mfg. Co. This is a consolidation of the Kay-Pim Mfg. Co., the Central Union Brass Co. and the Kingsland Foundry Co., all of St. Louis. The new company will operate all three plants. The Central Union Brass Co. make a line of electric street railway supplies and general brass castings. The Kingsland Foundry Co. operate the largest jobbing foundry in St. Louis, while the Kay-Pim Mfg. Co. make a specialty of elevating and conveying machinery and elevator and mill supplies. The combined capacity of the two foundries is 60 tons daily. The Kingsland-Kay-Cook Mfg. Co. will continue to push

the grain elevator machinery and power transmission business, the sales department of the two latter lines being in charge of A. H. Kay, vice-president.

General Catalogue No. 15 of the C. O. Bartlett & Snow Co., Columbus, Ohio, is what its name implies, a general catalogue of the lines manufactured and handled by the company. The book contains nearly 350 pages and lists almost everything in the line of elevating and conveying machinery, as well as a great many specialties for elevators and mills. The company make a specialty of labor-saving machinery and are prepared to modify the construction of any equipment to meet existing conditions. They will send a copy of their catalogue free of charge on request.

The Nordyke & Marmon Co. of Indianapolis, Ind., has favored this office with a handsome 14x28-inch halftone from a Longacre drawing of the company's plant. The picture is in a black oak frame which measures 28x48 inches. The present Nordyke & Marmon plant, with its immense buildings covering many acres of ground space, is in striking contrast to the original factory of 1851. The history of the company has been one of progressive achievement and can be ascribed to nothing but the policy of considering the interests of customers as coming before anything else.

The Invincible Grain Cleaner Co. of Silver Creek, N. Y., are going into the new year with a very heavy volume of business. January trade has been better than for any preceding year, and the prospects for the entire year are extremely bright. During their inventory shutdown the company made many changes in their works and added new tools and facilities for turning out the Invincible at an increased speed. They are now in the best of shape to turn out any order, no matter how rushed or how large, with promptness. In addition to keeping up the quality of their regular output the company are constantly improving their line and bringing out new machines.

"The Hess System of Drying" is the title of a 32-page booklet issued by the Hess Warming and Ventilating Co., Chicago, giving a complete description of the Hess Drier, its construction, operation and application. The booklet is a comprehensive treatise on grain driers and grain drying and considers every phase of the subject. Illustrations show the construction of the Hess Drier and fully explain its method of drying grain and other material. In addition there are a number of halftone illustrations from photographs of a number of Hess Driers at present in operation. A copy of this booklet will be sent free of charge to anyone who is interested in the subject of drying grain.

W. R. Sinks, general superintendent of the Barnett & Record Co. for the past twenty years, and R. H. Folwell, treasurer of the same company, also chief of their draughting department for five years, have both resigned their positions to become associated with the James Stewart Co., who do a very extended general contracting business and have offices in London, England; New York, Baltimore, Pittsburg, New Orleans, St. Louis, and Mr. Sinks and Folwell will, on March 1, open for them another office in the Fisher Building, Chicago, which will be known as Special Grain Elevator Department. Mr. Sinks has been identified very prominently with all the large contracts handled by the Barnett & Record Co., and is considered among elevator men to be an expert in elevator designing and construction. Mr. Folwell is an expert structural steel designer, and has designed all the large steel structures of the Barnett & Record Co., and just prior to his coming to them, he made all the drawings for Great Northern Railway Co.'s three-million-bushel steel elevator at West Superior, and remodeled the Great Northern steel elevator at Buffalo. The James Stewart Co. is a co-partnership concern, with J. C. and A. M. Stewart as principals. They are very strong financially, enjoy a very high commercial rating, and have a world-wide reputation as being most enterprising and up-to-date contractors. It will also be remembered by some of our readers

that it was this same J. C. Stewart who, a few years ago, surprised all England by building the great Westinghouse Works at Manchester, England, and the Savoy Hotel in London, both contracts amounting to several millions of dollars, for less money than asked by English contractors, and in one-quarter of the time. Grain men will, no doubt, appreciate this strong and experienced combination.

H. W. Caldwell & Son Co., Chicago, have in their latest general catalogue, No. 28, a book which is finer than anything previously issued by them. It is a volume of 736 pages, substantially bound in cloth and designed to form in itself a reference library on elevating and conveying machinery, power transmission and kindred appliances. To attempt to merely enumerate the lines represented would occupy more space than is at our disposal, as the index to the catalogue alone requires 15 pages of the book. Suffice to say that the company's complete output is listed. Instead of merely illustrating and giving prices of the articles shown, the company have added such details of explanation and description as will enable customers to form a fair idea of the article offered. This is a departure that is sure to be appreciated by the trade at large.

Fred Friedline, who was formerly a member of the firm of Henderson & Friedline, grain elevator engineers and contractors, is now conducting the business alone and is meeting with marked success. He has lately completed a large plant for the T. H. Bunch Mill and Elevator Co. at Little Rock, Ark., an illustrated write-up of which will appear in an early number of this paper. Mr. Friedline is a believer in personal supervision, and his policy is to contract for only as much work as he can properly look after personally. When he is erecting a large plant he aims to be on the ground the greater part of the time. He has mastered the art of handling men, and the results of the close attention he gives a job are extra good work and minimum cost to the owner. During 1904 his business showed an increase of 125 per cent over that of 1903, while the present outlook is that 1905 will be still better.

H. L. Day of Minneapolis, patentee and manufacturer of Day's Dust Collecting System, is sending out a calendar for 1905 that is one of the finest received this season. It is entitled an "Old Holland Mill," and shows a typical Dutch windmill at the edge of one of Holland's many canals. The scene is 9x12½ inches, but is mounted on bristol board 18x24 inches, making a calendar of more pretentious size than the ordinary. Owing to the size of the calendar Mr. Day feared that it would receive rough treatment in the mails during the holiday rush, and decided not to send it out until after this rush was over. Recipients, however, will appreciate the calendar none the less on this account, but will rather commend Mr. Day's thoughtfulness in seeing that the calendar arrives in perfect condition. The demand for these calendars has been great, and Mr. Day has sent them to a large number of his customers, but he still has a few left, and will be pleased to send additional copies on receipt of 50 cents in stamps.

The Pennsylvania lines west of Pittsburg positively refuse to deliver any cars, whether shipped to order or straight, without surrender of the original bills of lading. Shippers on these lines should be careful that all such documents be forwarded to the receivers promptly.

Iowa has been shipping corn to Eastern Asia. The first shipment was made about December 18, by the McNell agency, Minneapolis, track buyers, who routed 125 cars of corn by the Great Northern and Great Northern Transportation Company's steamship lines through to the Orient. The Bartlett-Frazier Company and the W. F. Morgan Company, also track buyers, are said to have had orders for over 500 cars of corn to go to the Philippines. These shipments are said to be the first that have been made directly from Iowa through Pacific Coast points to the far East.

RANGE OF PRICES AT CHICAGO.

The daily range of prices for cash grain at Chicago for the month ending Feb. 12 has been as follows:

JAN.	NO. 2. * R. W. H.T.		NO. 1. NO. * SP. W.H.T.		NO. 2 CORN.		STR. OATS.		NO. 2 R.YE.		NO. N. W. FLAXSEED.	
	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.
12.....	1.18 1/2	1.20 1/2	1.20	1.21	43	43	32	32	80 1/2	80 1/2	.....	.....
13.....	1.17 1/2	1.19 1/2	1.20	1.20	43 1/2	43 1/2	32	32	75	75	.....	.....
14.....	1.18 1/2	1.20 1/2	1.20	1.20	43 1/2	43 1/2	31 1/2	31 1/2	75	75	.....	.....
15.....	1.17 1/2	1.20 1/2	1.20	1.20	43	43	31 1/2	32 1/2	81 1/2	81 1/2	1.15	1.15
16.....	1.17 1/2	1.19 1/2	1.18 1/2	1.18 1/2	43 1/2	43 1/2	31 1/2	32 1/2	81 1/2	81 1/2	1.15	1.15
17.....	1.17 1/2	1.19 1/2	1.19	1.19	43	43	31 1/2	32 1/2	81 1/2	81 1/2	1.15	1.15
18.....	1.17 1/2	1.19 1/2	1.18	1.18	42 1/2	42 1/2	31 1/2	32 1/2	81 1/2	81 1/2	1.15	1.15
19.....	1.15 1/2	1.18 1/2	1.18	1.18	42 1/2	42 1/2	30 1/2	30 1/2	75	75	.....	.....
20.....	1.15 1/2	1.18 1/2	1.18	1.18	42 1/2	42 1/2	30 1/2	30 1/2	75	75	.....	.....
21.....	1.15 1/2	1.18 1/2	1.18	1.18	42 1/2	42 1/2	31 1/2	31 1/2	75	75	.....	.....
22.....	1.15 1/2	1.18 1/2	1.18	1.18	42 1/2	42 1/2	31 1/2	31 1/2	75	75	.....	.....
23.....	1.15 1/2	1.18 1/2	1.18	1.18	42 1/2	42 1/2	31 1/2	31 1/2	75	75	.....	.....
24.....	1.15 1/2	1.18 1/2	1.18	1.18	42 1/2	42 1/2	31 1/2	31 1/2	75	75	.....	.....
25.....	1.15 1/2	1.18 1/2	1.18	1.18	42 1/2	42 1/2	31 1/2	31 1/2	75	75	.....	.....
26.....	1.15 1/2	1.18 1/2	1.18	1.18	42 1/2	42 1/2	31 1/2	31 1/2	75	75	.....	.....
27.....	1.15 1/2	1.18 1/2	1.18	1.18	42 1/2	42 1/2	31 1/2	31 1/2	75	75	.....	.....
28.....	1.15 1/2	1.18 1/2	1.18	1.18	42 1/2	42 1/2	31 1/2	31 1/2	75	75	.....	.....
29.....	1.15 1/2	1.18 1/2	1.18	1.18	42 1/2	42 1/2	31 1/2	31 1/2	75	75	.....	.....
30.....	1.15 1/2	1.18 1/2	1.18	1.18	42 1/2	42 1/2	31 1/2	31 1/2	75	75	.....	.....
31.....	1.15 1/2	1.18 1/2	1.18	1.18	42 1/2	42 1/2	31 1/2	31 1/2	75	75	.....	.....
Feb:	1.18 1/2	1.20 1/2	1.20	1.21	42 1/2	42 1/2	31 1/2	31 1/2	80 1/2	80 1/2	.....	.....
1.....	1.15 1/2	1.20 1/2	1.20	1.21	42 1/2	42 1/2	31 1/2	31 1/2	80 1/2	80 1/2	1.22	1.22
2.....	1.15 1/2	1.20 1/2	1.20	1.21	42 1/2	42 1/2	31 1/2	31 1/2	80 1/2	80 1/2	1.22	1.22
3.....	1.15 1/2	1.20 1/2	1.20	1.21	42 1/2	42 1/2	31 1/2	31 1/2	80 1/2	80 1/2	1.22	1.22
4.....	1.15 1/2	1.20 1/2	1.20	1.21	42 1/2	42 1/2	31 1/2	31 1/2	80 1/2	80 1/2	1.22	1.22
5.....	1.15 1/2	1.20 1/2	1.20	1.21	42 1/2	42 1/2	31 1/2	31 1/2	80 1/2	80 1/2	1.22	1.22
6.....	1.15 1/2	1.20 1/2	1.20	1.21	42 1/2	42 1/2	31 1/2	31 1/2	80 1/2	80 1/2	1.22	1.22
7.....	1.15 1/2	1.20 1/2	1.20	1.21	42 1/2	42 1/2	31 1/2	31 1/2	80 1/2	80 1/2	1.22	1.22
8.....	1.15 1/2	1.20 1/2	1.20	1.21	42 1/2	42 1/2	31 1/2	31 1/2	80 1/2	80 1/2	1.22	1.22
9.....	1.15 1/2	1.20 1/2	1.20	1.21	42 1/2	42 1/2	31 1/2	31 1/2	80 1/2	80 1/2	1.22	1.22
10.....	1.15 1/2	1.20 1/2	1.20	1.21	42 1/2	42 1/2	31 1/2	31 1/2	80 1/2	80 1/2	1.22	1.22
11.....	1.15 1/2	1.20 1/2	1.20	1.21	42 1/2	42 1/2	31 1/2	31 1/2	80 1/2	80 1/2	1.22	1.22
12.....	1.15 1/2	1.20 1/2	1.20	1.21	42 1/2	42 1/2	31 1/2	31 1/2	80 1/2	80 1/2	1.22	1.22

During the week ending January 20, Prime Contract Timothy Seed sold at \$2.80 per cental; Prime Contract Clover Seed at \$13; Hungarian at \$1.25@1.40; German Millet at \$1.15@1.50; buckwheat \$1.00@1.05 per 100 pounds.

During the week ending January 27, Prime Contract Timothy Seed sold at \$2.80 per cental; Prime Contract Clover Seed at \$12.50@12.75; Hungarian at \$1.25@1.40; German Millet at \$1.20@1.50; buckwheat at \$1.05 per 100 pounds.

During the week ending February 3, Prime Contract Timothy Seed sold at \$2.82 1/2 @ 2.85 per cental; Prime Contract Clover Seed at \$12.50; Hungarian at \$1.30@1.60; German Millet at \$1.25@1.75; buckwheat at \$1.05 per 100 pounds.

During the week ending February 10, Prime Contract Timothy Seed sold at \$2.82 1/2 @ 2.85 per cental; Prime Contract Clover Seed at \$12.50; Hungarian at \$1.40@1.60; German Millet at \$1.35@1.75; buckwheat at \$1.05 per 100 pounds.

WHEAT RECEIPTS AT PRIMARY MARKETS.

The wheat receipts at eight primary markets, during the 32 weeks ending February 5, for the last two years, according to the Cincinnati Price Current, were as follows:

	1904-5.	1903-4.
St. Louis.....	16,908,000	18,989,000
Toledo.....	3,377,000	4,244,000
Detroit.....	1,980,000	1,499,000
Kansas City.....	28,069,000	32,328,000
Winter wheat.....	50,354,000	57,055,000
Chicago.....	20,747,000	21,292,000
Milwaukee.....	5,728,000	7,147,000
Minneapolis.....	64,472,000	65,181,000
Duluth.....	23,359,000	24,952,000
Spring wheat.....	114,308,000	118,572,000
Aggregate, 23 weeks.....	164,680,000	175,627,000

FLAXSEED AT CHICAGO.

The receipts and shipments of flaxseed at Chicago during the 18 months ending with Jan., as reported by Chas. F. Lias, flaxseed inspector of the Board of Trade, were as follows:

Months.	Receipts.		Shipments.	
	1904-05.	1903-04.	1904-05.	1903-04.
August.....	277,990	345,226	200,630	97,809
September.....	310,000	102,630	119,049	162,900
October.....	475,600	530,960	34,776	166,049
November.....	315,900	708,953	22,103	44,057
December.....	353,000	250,799	10,455	78,274
January.....	123,300	307,976	29,029	90,506
February.....	.....	215,736	60,764	42,694
March.....	68,000	415,554	.....	28,326
April.....	90,100	.....	34,079	.....
May.....	453,467	.....	15,055	.....
June.....	165,769	.....	45,931	.....
July.....	.....	.....	.....	.....
Total bushels.....	1,855,790	3,649,340	416,032	866,514

I think it is now safe to assume that the highest estimates made of the corn crop are not sustained by the experience and test of three months' handling; and I, therefore, venture to say, that the estimate of a crop of more than 2,300,000,000

bushels is misleading. Under ordinary circumstances this might not be alluded to, but since it has all the time been a matter of unusual dispute, and for the reason that there are already large producing states importing for their home uses, where the price is about as high as that in this city, the contention for some reduction in the estimate is well sustained. The experience after three months' marketing is quite as reliable as the hypothetical estimates made before the time of gathering.—E. W. Wagner, Chicago, February 8.

RECEIPTS AND SHIPMENTS.

Following are the receipts and shipments of grain, etc., at leading receiving and shipping points in the United States for the month of January, 1905:

BALTIMORE—Reported by H. A. Wroth, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	124,858	185,192	24,222	.....
Corn, bushels.....	2,280,930	2,027,494	2,553,095	1,809,947
Oats, bushels.....	174,100	201,359	460	3
Barley, bushels.....	5,187	10,777	.....	.....
Rye, bushels.....	37,101	124,499	.....	.....
Timothy Seed, lbs.....	1,486	4,660	9,239	4,660
Clover Seed, lbs.....	6,339	7,894	15,679	9,781
Hay, tons.....	4,136	4,963	1,341	1,994
Flour, bbls.....	183,190	238,851	90,029	281,055

BOSTON—Reported by Elwyn G. Preston, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Flour, bbls.....	101,868	130,908	25,945	84,669
Wheat, bushels.....	212,565	373,711	122,307	825,979
Corn, bushels.....	2,175,612	611,102	1,290,086	484,876
Oats, bushels.....	364,239	328,489	2,341	1,896
Rye, bushels.....	4,002	700	.....	.....
Flaxseed, bushels.....	9,799	6,683	17,159	25,279
Mill Feed, tons.....	1,584	874	364	41
Cornmeal, bbls.....	1,913	1,855	2,041	3,027
Oatmeal, bbls.....	7,688	8,359	1,848	7,892
Oatmeal, sacks.....	1,805	6,100	1,162	12,429
Hay, tons.....	8,720	12,500	301	3,630

BUFFALO—Reported by F. Howard Mason, secretary of the Chamber of Commerce.

Navigation closed.

CINCINNATI—Reported by C. B. Murray, superintendent of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	137,815	136,214	99,287	129,171
Corn, bushels.....	593,380	1,045,318	425,448	684,046
Oats, bushels.....	349,370	209,636	188,317	141,108
Barley, bushels.....	114,010	132,000	5,000	2,426
Rye, bushels.....	7,255	44,750	14,114	15,616
Timothy Seed, bags.....	465	880	1,468	2,475
Clover Seed, bags.....	1,670	5,259	2,134	3,816
Other Grass Seed, bags.....	17,004	5,317	10,571	9,995
Flax Seed, bushels.....	.....	.....	.....	.....
Broom Corn, lbs.....	8,780	8,657	4,476	5,592
Hay, tons.....	121,933	133,061	101,267	96,162

CLEVELAND—Reported by F. A. Scott, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	52,010	53,667	10,450	58,480
Corn, bushels.....	1,614,268	1,429,698	1,274,079	598,521
Oats, bushels.....	558,544	143,244	336,463	69,896
Barley, bushels.....	15,580	13,863	.....	1,708
Rye, bushels.....	.....	.....	2,886	.....
Flaxseed, bushels.....	.....	.....	.....	.....
Hay, tons.....	4,299	2,937	819	646
Flour, bbls.....	4,006	4,341	2,021	1,979

DETROIT—Reported by F. W. Waring, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	24,791	118,072	14,904	44,493
Corn, bushels.....	375,815	519,329	106,473	201,690
Oats, bushels.....	190,071	344,419	61,235	52,214
Barley, bushels.....	90,895	366,199	21,199	26,559
Rye, bushels.....	11,684	24,590	30,877	29,691
Flour, bbls.....	10,600	22,400	6,000	15,830

DULUTH—Reported by H. B. Moore, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	1,115,528	1,332,636	119,970	141,458
Corn, bushels.....	44,916	10,679	.....	.....
Oats, bushels.....	402,445	833,359	56,416	34,987
Barley, bushels.....	38,733	143,657	69,575	113,815
Rye, bushels.....	34,782	39,916	.....	.....
Flax Seed, bushels.....	611,500	941,524	128,720	316,910
Flour, bbls.....	41,840	64,200	40,800	61,040

GALVESTON—Reported by C. McD. Robinson, chief inspector of the Cotton Exchange and Board of Trade.

Articles.	Receipts.		Shipments.	
	1905.	1904.	1905.	1904.
Wheat, bushels.....	1,488,880	.....
Corn, bushels.....	1,759,492	342,514
Rye, bushels.....

KANSAS CITY—Reported by E. D. Bigelow, secretary of the Board of Trade.

Wheat, bushels.....	1,776,600	4,884,800	1,077,300	3,371,440
Oats, bushels.....	1,017,600	859,400	1,585,100	1,385,100
Oats, bushels.....	864,800	392,400	270,000	430,800
Barley, bushels.....	38,000	75,000	9,000	12,000
Rye, bushels.....	16,800	32,000	8,000	17,600
Brn, tons.....				2,400
Flour, bushels.....				5,400
Hay, tons.....	10,960	9,210	4,170	5,400
Flour, bbls.....			107,400	118,800

ELEVATOR AND GRAIN NEWS

CHICAGO.

F. L. Reynolds has taken the place of foreman at the Hawkeye Elevator for Mr. Frank, who operates the Hawkeye Elevator for Mr. Fitzgerald, the owner.

Henry Burk, late foreman of the Hawkeye Elevator, at West Hammond, Ill., has accepted a position with and is now at the Calumet Grain Company's "Little Calumet" Elevator, at Ninety-sixth Street and the Calumet River, South Chicago.

Frank Marshall, who operates the Hayford Elevator, at Seventy-fifth Street and Central Park Avenue, Hayford, Ill. (Western Grain Salvage Co.), has installed a grain bleacher at this plant. This would indicate that the plant, which heretofore has been operated only when salvage grain from a fire was to be dried and cleaned, will before long be operated as a cleaning, grain drying and bleaching plant, and so will handle other grain besides salvage grain.

HIGH SWITCHING CHARGES.

Owing to the excessive demand of \$2 extra on cars switched from other railroads by the Chicago & North-Western and the Wabash Railroads, the Iowa Elevator, recently operated by Harris, Scotten & Co., and the Wabash Transfer Elevator, operated by Requa Bros., have had to close, being practically forced out of business, as they can not be operated except at a loss, with a charge of \$5 for switching on each and every car, each way. Switching charges have heretofore been \$3 per car on all railroads, and this amount has always been considered a good paying rate by the railroad people, and the increase is felt to be unwarranted.

The regular rate of \$3 per car brings the terminal charges in Chicago so high that it absorbs about all the profit there is in the business, and this advance of \$2 per car extra demanded by the roads named is a knockout blow to the Chicago elevators affected and must divert their grain business to other points where the terminal charges are more reasonable.

NEW MILL IN CHICAGO.

Away out at the southeast corner of Cook County a new mill has been put in operation and a new business has been opened up. The plant in question will utilize the by-products of breweries, distilleries and malt houses in the manufacture of cattle feed from dried brewers' and distillers' grains and malt sprouts from the numerous malt houses, together with molasses or other saccharine syrups to make it palatable, as malt sprouts are apt to be refused by cattle on account of their bitter taste, unless sweetened.

Brewers' and distillers' grains, being rich in protein and albumen, take the first place among the feed by-products on account of their wholesomeness, especially in the case of cattle and swine. They affect to a high degree the flow of milk, on which account they deserve preference for feeding milch cows. Malt sprouts contain a very large amount of nutritive substances, and are especially valuable as a feed for milch cows on account of the large amount of easily assimilable nitrogenous matter. We predict a successful future for this new industry.

THE ALTON ELEVATORS.

The Alton Elevators "A" and "B," located at Twenty-second Street and Chicago River, constructed in the early days of Chicago by the late Geo. A. Seaverns, the pioneer in the elevator and grain cleaning business, will be sold to a wrecking concern and torn down and the lumber and debris removed in the near future. The land upon which it stands will be purchased by the Chicago and Alton Railroad Co., to be used for site of railroad freight houses, docks, etc.

Geo. A. Seaverns came to Chicago from Boston about fifty-two years ago. He was then about twenty years of age, and entered the office of G. S. Hubbard & Co. as a clerk, remaining with that firm for two or three years. When he entered into business for himself on the Chicago Board of Trade, he converted a lot of old warehouses at Fourteenth and Clark streets into a grain cleaning house and made a fortune by cleaning and mixing No-grade wheat with No. 2 to make a grade of Rejected or No. 3 wheat. [The grade made was really Rejected, there being only two grades in the old days, No. 2 and Rejected]. Other operators who endeavored to raise the grade from Rejected to No. 2, were not on the right track and were not so successful. Seaverns graded the grain down, and made a fortune while others tried to raise the

grade; but the difference between No. 2 and Rejected was too wide, so that it required too much good wheat to make No. 2, and mixing that way did not pay as well. This old cleaning house covered over a block of land and was finally sold to the Western Indiana R. R. for right-of-way and torn down about twenty-five years ago.

While Mr. Seaverns was associated with Jacob Weil in the real estate and mortgage business, he constructed hundreds of cottages in all parts of the city and sold them on the installment plan. When the State Savings Bank and the Fidelity failed, Seaverns and Weil bought up all the books and claims of depositors against the banks and made money by the deal. He was at one time supposed to be one of the most wealthy men in Chicago. It was an adage on the Chicago Board of Trade at one time that whatever Seaverns touched, in a speculative way, turned to gold.

ILLINOIS.

A farmers' elevator company has been organized at Forest City, Ill.

J. M. Herschberger has installed a car loader in his elevator at Leverett, Ill.

Claud Carter is contemplating the erection of an elevator on the new railroad at Alvan, Ill.

The Rogers Grain Co.'s new elevator at Charlotte, Ill., is completed and in operation.

Christy & Co. have installed a five-horsepower gasoline engine in their elevator at Viola, Ill.

Some new machinery has been installed in the Atlas Grain Co.'s elevator at West Brooklyn, Ill.

A. D. Rolston is reported to have sold his grain and coal business and general store at Phelps, Ill.

The Smith-Hippen Co.'s elevator at Kilbourne, Ill., has been undergoing alterations and repairs.

The grain and feed business of W. A. Hough, Chicago, has been incorporated with a capital stock of \$1,500.

Robert Livingston has sold his elevator at Minonk, Ill., to O. M. Davidson and will remove to Toluca, Ill.

O. J. Roberts has sold a one-half interest in his grain business at Roberts, Ill., to Albert Gullett of that place.

The Ensign & Wheeler Elevator at Hudson, Ill., has been purchased by A. W. Skinner, who formerly owned it.

The Shellabarger Elevator Co. has been making some repairs and improvements to its elevator at Gibson City, Ill.

The Farmers' Grain and Live Stock Co. of Morton, Ill., has increased its capital stock from \$3,000 to \$4,200.

The Keiser & Holmes Elevator Co. of Gibson City, Ill., is reported going out of the grain and lumber business at that place.

The corporate name of the Brooks & Harrison Co., grain merchants at Bloomington, Ill., has been changed to the Standard Grain Co.

The Farmers' Grain and Live Stock Co. has about completed its new elevator at Morton, Ill., which replaces the one burned on October 29.

Ernst Little has removed from Kirkwood, Ill., to Eleanor, this state, where he has purchased an interest in an elevator and grain business.

At the annual meeting of the Sidney Grain Co., held recently at Sidney, Ill., the stockholders voted to increase the capital stock from \$4,000 to \$10,000.

John and Patrick Hayes, who have been conducting a grain business at Galesville, Ill., under the style of Hayes Bros., have dissolved partnership.

James F. Huxtable has sold his two elevators at Benson, Ill., to J. E. Eckhart & Co. The consideration was \$10,000, possession to be given April 1.

A farmers' elevator company is being organized at Millington, Ill., to either build an elevator or purchase the one at that place owned by the Neola Elevator Co.

The elevators of the Mattoon Elevator Co., located at Mattoon, Coles and Doran, Ill., have been purchased by the recently organized Mattoon Grain Co. for \$35,000.

Murray & New are erecting a new grain elevator at Tomlinson, Ill., to replace the one burned last October. The new house is expected to be completed by May 1.

The Farmers' Elevator Co. of Wenona, Ill., has been chartered with a capital of \$10,000, to deal in grain, farm supplies, etc. Adolph Schwanke, Samuel McAllister and Leslie Kemp are the incorporators.

C. B. Crawford of Nachusa, Ill., has opened up the old Dysart Elevator in Dixon, Ill., and is operating it with his son, Edgar Crawford, in charge. It is said that Mr. Crawford will sell his general store at Nachusa and move to Dixon. He will

continue to operate his elevator at Nachusa, another son being in charge.

Zeller & Hutchinson are reported to have sold their grain business at Ashton, Ill.

The Younglove & Boggess Co. of Mason City, Iowa, has closed a contract with F. E. Streitmatter of Princeville, Ill., for the erection of a 20,000-bushel elevator on his farm near that place.

The Harvey Elevator Company has been incorporated at Chicago, Ill., with a capital of \$85,000, to deal in grain, etc. Henry W. Rogers, James C. Rogers and Charles J. Hurlbut are the incorporators.

Earlville, Ill., is to have a third elevator. Edward Weidner has purchased a tract of ground near the crossing of the Burlington and North-Western tracks and will shortly commence the erection of an elevator.

Holsen & Schucker have sold their grain elevator and flour mill at Mt. Carmel, Ill., known as the Bluff City Mills, to Frank and W. E. Storckman. The formal transfer of the property occurred on February 1.

The Gridley Elevator Co. has been granted a charter at Gridley, Ill., to deal in grain, produce, fuel, etc. The capital stock is \$6,000 and the incorporators are Frederick Frey, J. C. Luckett and Percy Kingdon.

The Central Illinois Grain Co. has been chartered at Ashland, Ill., with a capital of \$65,000, to deal in grain and manufacture grain products. The incorporators are: William Lynd, George Husman and Edwin Beggs.

Ball & Twist have sold their elevators at Toluca, Custer and Magnolia, Ill., to Davidson & Livingston of Minonk, Ill., possession to be given July 1. The new firm is composed of Robert Livingston and Paul Davidson.

Farmers of Troy Township, in Will County, Ill., will erect an elevator on the line of the new Rockdale, Joliet & Lockport Railway, near Joliet. The farmers' organization has a capital stock of \$15,000 and has secured a site upon which to build the elevator.

The Illinois Lumber, Grain and Coal Co. has been chartered at Hoopston, Ill., to operate lumber yards and grain elevators and deal in coal and other fuel. The capital stock is \$60,000 and the incorporators are: J. H. Dwyer, H. C. Finley and M. H. Lewis, all of Hoopston.

John T. Gelsthorpe has sold his grain business, elevator and cribs at Beason, Ill., to the Evans Elevator Co. of Decatur, Ill. George Seal will continue as manager under the new ownership. Mr. Gelsthorpe retires from active business after spending over twenty-five years in the grain trade.

The Chicago Drainage Board has leased nine acres of land on the north bank of the Drainage Canal at West Forty-sixth Street, Chicago, to the Chicago and Western Indiana Railroad Co., which will build grain elevators and warehouses in connection with large freight yards. The lease runs for a period of fifty years and the lessee agrees to build the necessary docks and excavate the channel to its full width. J. N. Vance is the lessee and is said to be acting for the railroad company. The rent for the first ten years will be 5 per cent a year on a valuation of \$2,500 an acre, and for the next fifteen years 5 per cent on a valuation of \$5,000 an acre. There is a clause in the lease providing for a revaluation at the end of twenty-five years.

The Shellabarger Elevator Co. of Decatur, Ill., has sold its elevator on the Wabash right-of-way at Lovington, Ill., to H. E. Kinney of Mattoon, Ill., and has purchased Mr. Kinney's 40,000-bushel elevator at Coles, Ill. The transfer of both properties took place on February 6. The elevator at Coles is new, being completed last summer, and is located on the main street of the town. Coles is a good grain station on the Peoria branch of the Illinois Central near Mattoon. The house at Lovington is practically new and is equipped with modern machinery. Lovington is said to be one of the best little towns in Central Illinois. Mr. Rucker will remain as manager at Lovington for Mr. Kinney. The deal for the sale of the elevator properties was negotiated by C. A. Burks of Decatur.

Finding that the Chicago Terminal Elevator Co. had been operated at an annual loss of \$100,000, Referee in Bankruptcy Eastman, on January 13, recommended to Judge Kohlsaat that the company should be declared bankrupt. Judge Kohlsaat entered this order. A receiver had been appointed by Judge Tuthill in the person of Fred M. Blount. Creditors of the concern then went into the federal courts and the Equitable Trust Co. was appointed receiver by Judge Kohlsaat. The matter was referred to Referee Eastman and he took evidence for several months. It is said that the Terminal company ten years ago issued bonds amounting to \$2,500,000, and it is also said that there was more than \$1,000,000 in first mortgages outstanding. Referee Eastman said that he learned that

the mortgage indebtedness of the concern is more than the value of its assets. Attorneys for the concern filed a motion for an appeal.

W. H. Council is rebuilding his elevator at Vanwood, Ill., which was burned on December 7. The new building will be larger and more modern than the old one. It is expected to have the new elevator completed by about April 1.

About seventy-five farmers of Montmorency Township, Whiteside County, have organized a branch of the National Farmers' Exchange and elected John Ferris president and Elmer Hess secretary. The organization is negotiating for the purchase of the Northwestern Elevator Co.'s house at Van Petten, Ill.

IOWA.

Armour & Co. will rebuild their elevator at Centerville, Iowa.

The Farmers' Elevator Co. of Eagle Grove, Iowa, will build an elevator.

The Thorpe Elevator Co. will erect a new elevator at Struble, Iowa.

The Farmers' Elevator Co. of Lemyon, Iowa, has been incorporated with a capital stock of \$1,500.

F. E. Dunn has sold his elevator at Delta, Iowa, to Thomas Pratt of Lohrville, that state. The consideration was \$2,500.

Henry Rippe has sold his elevator at Estherville, Iowa, to Minneapolis parties who will take possession about March 1.

The California Grain Co. of California, Iowa, has elected Charles House president and H. R. Coulthard secretary and manager.

A stock company of farmers has been formed at Mallard, Iowa, to buy grain. W. White is president and J. Stafford secretary.

A co-operative grain company is being organized to build an elevator on the Des Moines, Iowa Falls & Northern Railway at Buckeye, Iowa.

The Counselman Elevator at Gilmore City, Iowa, has been purchased by the local farmers' organization and will be operated on the co-operative plan.

Wright & Blair's new 10,000-bushel elevator and feed mill at Glenwood, Iowa, are completed and in operation. The Younglove Construction Co. of Mason City, Iowa, had the contract.

Ike Knudson of Akron, Iowa, has let the contract to the Younglove & Boggess Co. of Mason City, Iowa, for repairing his elevator and installing a new 8-horsepower Fairbanks-Morse Engine and other machinery.

The Central Grain and Fuel Company of Hedrick, Iowa, has leased five Iowa Central elevators heretofore operated by J. W. Ayers. The houses are located at Martinsburg, Hedrick, Ollie, Nugent and Richland, Iowa.

At Inwood, Iowa, the Farmers' Co-operative Produce Association has been organized and will buy or build a grain elevator. The officers are: Aug. Schemmel, president, and Otto Benning, secretary. The company will handle coal, salt, etc., in connection with the grain business.

B. C. Ragan & Sons of Valley Falls, Kan., have purchased Neri Ogden's elevator, grain and fuel business at Lemars, Iowa. The new owners have taken possession and will continue the business. Carl Ragan will have charge as resident manager. The firm of Ragan & Sons operates a line of twenty elevators and does an extensive grain business. It has five houses in Iowa, eight in Kansas and seven in Nebraska. Mr. Ogden will remove to Martinsburg, Iowa, and engage in the banking business.

OHIO, INDIANA AND MICHIGAN.

The grain firm of C. T. Pierce & Bro. at Defiance, Ohio, has been dissolved.

Gwin succeeds Fisk & Gwin in the grain business at Union City, Mich.

The new Bright Elevator at Christiansburg, Ohio, is reported completed.

Shrider & Binkley have completed an elevator at Lafayette (Herring P. O.), Ohio.

Frank B. Mabbitt, who recently sold his elevator at Cicero, Ind., will erect an elevator at Arcadia, Ind.

J. J. Neill's elevator at East Rochester, Ohio, was recently equipped with improved Hall Distributor.

Two elevators will be built at Waterloo, Ind., next spring. Grain will be carried on the new electric railway.

The Valley City Milling Co. of Grand Rapids, Mich., has equipped its elevator with an improved Hall Distributor.

Lewis Wilkinson has sold his interest in the grain, hay and feed business of Wilkinson & Co. at New Castle, Ind., to George Ballard, possession to be given March 1. The firm will then consist

of Mr. Ballard and A. E. Wilkinson, who will continue the business under the style of Wilkinson & Ballard.

John Hazeltig will rebuild the elevator and warehouse at Cambridge City, Ind., which were burned on October 19.

H. E. Moon & Co. is the style of the firm succeeding Howard E. Moon in the grain and feed business at East Liverpool, Ohio.

Robert Kolter, proprietor of the mill at Spencerville, Ohio, has purchased the elevator at Elgin, Ohio, and opened it for business.

Shaw & Bauman, grain dealers at Rushville, Ohio, have admitted Clay Shaw to partnership. The firm name is now Shaw, Bauman & Co.

M. S. Howland, proprietor of the flour mill at Lakeville, Mich., has purchased an interest in J. A. Jossman's grain and hay business at Oxford, Mich.

Fitch & Freeman, grain and fuel dealers at Dayton, Ind., have erected a building near their elevators for the purpose of handling building material and lumber.

La Due & Carmer of Auburn, Ind., have bought the elevator at that place operated by Hoodmeier Bros., and the elevator at St. Joe, Ind., owned by the B. & O. Co.

In order to divert the trade of farmers from South Bend, Ind., the merchants of Niles, Mich., propose to organize a stock company and erect a grain elevator and warehouse.

D. D. Van Nocker has purchased the interest of his partner, Mr. Swick, in the elevator and grain business of Van Nocker & Swick at Britton, Mich., and will continue the business alone.

Reynolds Bros., grain merchants of Toledo, Ohio, recently sold a car of oats containing 2,503 bushels on the Toledo Produce Exchange. This is said to be the largest consignment of oats ever loaded into a single car.

At the annual meeting of the Whitmer Grain Co. of Grabill, Ind., held on February 1, the following officers were elected: President, Joseph Whitmer; vice-president, Joseph Grabill; secretary, E. Erhart. The annual report showed the company to be in a prosperous condition.

The W. H. Gardner Grain Co. of Bellevue, Ohio, has bought the milling and grain business of McLaughlin & Biebricher at that place. This gives the Gardner Co. control of the grain and flour business at Bellevue. The company has increased its capital stock from \$50,000 to \$75,000.

The semi-annual directors' meeting of the Ohio Milling and Elevator Co. was held at Marion, Ohio, on January 17. The report of Secretary L. J. Smith showed the affairs of the company to be in a splendid financial condition. The business of the past six months was found to have far exceeded expectations and it was decided to sell \$5,000 worth of additional stock. The company is capitalized at \$25,000.

MINNESOTA AND WISCONSIN.

The O. & M. Elevator at Farwell, Minn., is closed.

A farmers' elevator will be built at Storden, Minn.

A farmers' elevator is to be built at Rothsay, Minn.

A farmers' co-operative elevator is talked of at Tintah, Minn.

There is talk of building a farmers' elevator at Westbrook, Minn.

Another elevator will be built in Halma, Minn., in the near future.

A movement is on foot to erect a farmers' elevator at Lake Park, Minn.

A stock company is being organized at Lamberton, Minn., to build a farmers' elevator.

The Crown Elevator at Odessa, Minn., has been opened with E. E. Webb of Minneapolis in charge.

J. M. Dickson has purchased G. Crossman's grain elevator and implement business at Fulda, Minn.

H. B. Borneman has sold his elevator at Bronson, Minn., to the Minnesota & Western Grain Co.

A new boiler has been installed in the power plant of the A. G. Wells Co.'s elevator at De Pere, Wis.

The St. John Grain Co. is reported to have closed its elevator at Winnebago City, Minn., for the season.

A co-operative organization is being formed at Milroy, Minn., to build an elevator and carry on a fuel business in connection.

The Farmers' Elevator Co. of Owatonna, Minn., at its annual meeting, held on January 17, decided to keep its house open during the coming season. The local paper states that Mr. McGrath, the manager, advised the stockholders to "quit scrapping

and pull together." At the meeting a motion was carried to assess all the stock of the association fifty cents on the dollar.

T. A. Brann, who has been operating the Winter & Ames Elevator at Bagley, Minn., under lease, has closed the house for the season.

The Farmers' Exchange has appointed a committee to investigate the advisability of buying or building an elevator at Lake Benton, Minn.

The Benton County Farmers' Exchange Elevator Co. has been organized at Sauk Rapids, Minn., and has purchased the Stanton Elevator at that place.

F. Albrecht & Sons, millers at Staples, Minn., have bought the Peavey Elevator Co.'s elevator and flat house at that place. They have a capacity of 18,000 bushels.

The Skewis-Moen Co. has taken over the elevator at Currie, Minn., recently purchased from the American Grain Co. C. E. Jerome has been retained as agent.

The Farmers' Elevator Co. of Bird Island, Minn., has been organized with a capital stock of \$10,000 to build an elevator. Nick Bruels is president and Joe Haggett secretary.

The Hubbard & Palmer Co. and the Benson Grain Co. have closed their elevators at Avoca, Minn. The Peavey Elevator Co. and Sage Bros. will keep their houses open for the present.

The Taylor Elevator Co. has closed its elevator at Dennison, Minn., for the season. J. L. Hefferman, the manager, has entered the employ of the T. M. McCord Co., grain merchants of Minneapolis.

Plans are being prepared for the 600,000-bushel steel tank elevator to be built in Milwaukee, Wis., by a syndicate of local grain men. It will cost about \$250,000 and will be erected in the Muskego Avenue yards of the Milwaukee road.

At Wheaton, Minn., an organization, to be known as the Farmers' Elevator Company of Wheaton, is being formed to either buy or build an elevator and conduct a grain business on the co-operative plan. A committee is soliciting the sale of shares among the farmers of that section.

The Farmers' Co-operative Warehouse Association of Pelican Rapids, Minn., has elected L. M. McLeod president and Fred Damschen, secretary and manager. A 30,000-bushel elevator will be built in the spring. The association has asked for a site on the Great Northern right-of-way.

The Blooming Prairie Farmers' Elevator Co. is the style of the organization just formed at Blooming Prairie, Minn., to buy or build an elevator and operate it on the co-operative plan. The company will not become a member of the Minnesota Farmers' Exchange. The Hunting Elevator Co. is said to have offered to sell its house at Blooming Prairie to the farmers' organization.

The McCarthy Bros. Co., grain commission merchants of Minneapolis and Duluth, have, in connection with Eastern capitalists, purchased the elevators and flour mill at Duluth, Minn., known as the Imperial mill property. The plant was owned by the Standard Milling Co. The purchase price is reported as \$250,000. The main elevator has a capacity of 1,000,000 bushels and is equipped as a cleaning and shipping house, while the mill elevator has an additional capacity of 600,000 bushels and is equipped with wheat cleaning machinery. By the terms of the sale the mill is not to be used for the manufacture of flour. The new owners will operate the elevators under the name of the Capitol Elevator Co. and have filed articles of incorporation under that style. The capital stock is \$300,000, and the incorporators are: L. C. Harris, J. D. Ellis and S. M. Reilly, all of Duluth.

THE DAKOTAS.

Another elevator will be built at Gladstone, N. D., in the spring.

A company is being organized at Hazel, S. D., to build a farmers' elevator.

The new Burgess Elevator at Munich, N. D., is completed and in operation.

Steps are being taken to organize a farmers' elevator company at Valley City, N. D.

A farmers' organization has been formed at Verdon, S. D., to build a co-operative elevator.

Philip Schuh has sold his interest in the grain business at Underwood, N. D., to Koth Bros.

Gackle & Gotz of Kulm, N. D., will build an elevator at Underwood, N. D., in the spring.

The Lake Preston Milling Co. of Lake Preston, S. D., has purchased an elevator at Howard, S. D.

William Krotter has been granted an elevator site on the North-Western right-of-way at Fairfax, S. D.

The organization of the Co-operative Elevator Co. of Platte, S. D., has been completed and the contract for the erection of an elevator will soon be

awarded. G. F. Brewster is president and August Peterson secretary.

The Atlas Elevator Co. has purchased A. J. Riske's feed mill and lumber business at Doland, S. D.

G. A. Hales of Flandreau, S. D., is said to contemplate engaging in the grain business at Platte, S. D.

Great Bend, N. D., farmers are planning the erection of an elevator and feed mill at that place to cost \$3,000.

The Farmers' Elevator Co. of Sheyenne, N. D., has increased the price of its shares from \$25 to \$50 a share.

It is announced that farmers in the vicinity of Wahpeton, N. D., will build a 30,000-bushel elevator at that place.

C. H. Hill has sold his elevator at Colton, S. D., to J. E. Schmidt of Salem, S. D., possession to be given March 1.

Farmers tributary to Humboldt, S. D., are reported to be organizing a company to build a co-operative elevator.

Gesche Bros. & Co. have sold their grain and implement business at Anamoose, N. D., to the Anamoose Grain and Machinery Co.

I. L. Berg, who has been operating a flat house at Vela, N. D., has been granted a site on the Soo line at that place and will erect a large elevator.

Thomas Garland's new 15,000-bushel elevator at Yale, S. D., is completed. It was built by the Younglove Construction Co. of Mason City, Iowa.

An organization of farmers has been formed at Emerado, N. D., to build a co-operative elevator. The temporary officers are: President, George Lee; and secretary, W. Hancock.

The Farmers' Elevator Co. of Corona, S. D., has made application to the state board of railroad commissioners for an elevator site on the Milwaukee right-of-way at that place.

It is stated that Shanard Bros.' elevator at Scotland, S. D., took in ninety-four loads of grain in three days recently, of which eighty-nine loads were corn. A. E. Parmenter is agent.

A farmers' elevator will be built at Ayr, N. D., in the spring. A company has been organized for that purpose and the following officers elected: W. F. Chapman, president; F. Collins, secretary.

Charles H. Baker has purchased the interest of his partner, Truman Miller, in the firm of Miller & Baker, dealers in grain, fuel and feed at Devil's Lake, N. D., and will continue the business alone.

Jones & Metcalf, grain buyers of Madison, S. D., have been granted an elevator site on the Milwaukee right-of-way at Ramona, S. D., through the efforts of the South Dakota Board of Railroad Commissioners.

The Powers Elevator Co. will tear down its old elevator at Eldridge, N. D., and erect a new one with a capacity of 50,000 bushels. The company will also build a cottage for the agent to live in. The material from the old elevator will be distributed among the farmer patrons of the company.

Schulte & Sons of Naples, S. D., have asked the South Dakota Board of Railroad Commissioners to aid them in securing the transfer of a lease from the present holder of an elevator property at Naples. The elevator is on the right-of-way of the Milwaukee road and it declines to make the transfer from the present lessee.

SOUTHERN AND SOUTHWESTERN.

E. J. Miller will erect a new elevator and cotton gin at Perry, Okla.

S. O. Couch has sold his grain business at Magnolia, Ark., to Prator & Keith.

L. C. Carson has succeeded to the grain business of Hamrick & Carson at Cleburne, Texas.

J. H. & L. E. Edge succeed the firm of Edge Bros. in the grain business at Bryan, Texas.

The Kaw City Mill and Elevator Co. of Kaw City, Okla., is reported to be building an elevator in the new town of Burbank, Okla.

The Lewisport Mill Co. of Lewisport, Ky., will build a 40,000-bushel steel elevator in the spring. The contract has not been awarded.

The Southern Star Roller Mills of Perryville, Ky., will, it is reported, erect a grain elevator with a capacity of 20,000 to 30,000 bushels.

Harsh Bros. & Co., hay and grain receivers of Nashville, Tenn., are remodeling their Merchants' Warehouse in that city and increasing the capacity by the erection of an addition for grain storage. The warehouse is 145 feet square and contains storage room for 100,000 bushels of grain and 60 carloads of hay. The elevator addition will be 24x80 feet in size and 75 feet high. It will have a capacity of 25,000 bushels and will be equipped with a complete line of grain handling and elevating machinery, including hopper scales. An

additional side track will be built to provide better shipping facilities.

Business men of Lewisburg, Tenn., are organizing a company to handle grain and produce.

Plans are being prepared for the rebuilding of the South Texas Grain Co.'s burned elevator at Houston, Texas. It is stated that a rice mill will be built in connection.

The old officers of the Covington Grain and Grocery Co. of Covington, La., were re-elected at the recent semi-annual directors' meeting. A semi-annual dividend of 6 per cent was declared.

The officers of the recently chartered Price Shofner Grain Co. of Little Rock, Ark., are: President, James Thomas; vice-president, Oscar Davis; secretary, treasurer and manager, Price Shofner.

The Morgan-Hardy Grain Co. of Union City, Tenn., has changed its corporate name to the Hardy Grain Co. and increased its capital stock from \$20,000 to \$60,000. The company has opened offices in St. Louis.

It is announced that the National Cotton Oil Co. of Montgomery, Ala., will erect a 3,000-bushel corn mill and a 50,000-bushel grain elevator in that city. The plant will cost \$35,000 and will be operated by electrical power.

James L. Vance & Co. of Chilhowie, Va., have incorporated with a capital of \$10,000, to deal in hay, grain, seeds, fertilizers and machinery. The officers are: J. L. Vance, president; T. B. Wolf, secretary; Q. A. Eller, treasurer and manager.

James Stewart & Co. of Pittsburg, Pa., have been awarded the contract for the extensive work to be done in connection with the terminals of the Rock Island and Frisco systems at Port Chalmette (New Orleans), La. The contract awarded the Stewarts will amount to \$2,500,000 and includes the construction of a slip from the Mississippi River, two large warehouses and a 1,000,000-bushel steel grain elevator. The elevator alone will cost \$1,000,000. The work at Port Chalmette is to be completed within 20 months and will give employment to 2,500 men. Stewart & Co. are especially equipped for the work, having constructed every terminal in New Orleans and having erected every grain elevator now in use on the Gulf of Mexico coast. The general scheme of terminals was designed under the direction of A. M. Stewart, financial head of the firm, and the work will be pushed aggressively under the direction of J. C. Stewart.

EASTERN.

A grain store has been opened in Sanford, Me., by W. A. Fall.

E. F. Kenney has opened a feed and grain store at Kennebunk, Me.

George E. Clark will engage in the grain business at South Hanson, Mass.

The Mitchell-Sawyer Co. is now operating its new elevator and feed mill at Sterling, Mass.

Henry A. Bugbee has let the contract for the erection of his new grain elevator and warehouse at Willimantic, Conn.

Cleveland Bros., grocers and grain merchants at Danvers, Mass., are building an addition to their premises for the storage of hay and grain.

H. Ridgely Harrington has leased the second floor of the building in Dover, Del., owned by the Dover Machine Works, and opened a grain store and feed mill.

Van Zandt & Voorhees have let the contract for the erection of their new elevator at Plainfield, N. J. It will cost about \$12,000 and will be constructed of concrete blocks.

The Green River Grain Co. of Greenfield, Mass., has opened a retail store in that city. Heretofore all trade was supplied at the company's mill. The concern is now owned by John McLaughlin, who purchased the business from H. C. Black a short time ago.

At the recent annual meeting of the stockholders of the White Hall Grain, Milling and Supply Co. of White Hall, Md., the following officers were elected: President, Nelson Gilbert; vice-president, Samuel W. Black; treasurer, Walter D. Bahn; secretary, M. W. Bahn.

W. W. C. Booker of Intervale, N. H., and Arthur R. Jefferson of North Conway, that state, have purchased the grain and flour business at Nashua, N. H., formerly conducted by the late Henry Stearns. They have also taken over the elevator near Nashua and will operate it.

The Oneonta Milling Co. of Oneonta, N. Y., has had plans prepared and as soon as spring opens will commence the erection of a large grain elevator near its mill in that city. The new building will be approximately 108x72 feet in size and 100 feet high. It will be of frame construction resting on a concrete foundation, and will have a capacity of about 450 carloads of grain. The company's present storage facilities have proven inadequate

to the needs of the business. Additional tracks for the use of the milling company are now being built by the D. & H. Railway.

Frank H. Crehore has purchased an interest in A. B. Miner's grain business at Springfield, Mass., and they will continue it under the firm name of Miner & Crehore.

The United Feed Co. has been incorporated at Camden, N. J., to deal in grain and cereals. The capital stock is \$5,000 and the incorporators are: Gustavus A. Muller, Edward A. Schmidt, M. Eldridge Pennock, Frederick J. Poth, August W. Woebken, Louis J. Bauer and William F. Rex.

The Empire Grain and Elevator Co. held its annual meeting at Binghamton, N. Y., on January 17. Officers were elected as follows: President, Charles S. Weston; vice-president, A. W. Dickson; secretary and treasurer, L. M. Wilson. These with T. H. Wilson and William Cornell constitute the board of directors.

D. H. Swart and H. T. Bailey, who for the past three years have been engaged in business at Washington, Pa., as dealers in grain, hay and builders' supplies, under the firm name of Swart & Bailey, will erect a two-story building, 60x180 feet in size, and handle implements and vehicles in connection with their other interests.

The firm of Gardner & Arnold, dealers in grain, hay and groceries at Fall River, Mass., has made an assignment to J. C. MacKenzie of the grain and hay firm of MacKenzie & Winslow. The store is closed and the business will be wound up as soon as possible. The firm of Gardner & Arnold was composed of Frank M. Gardner of Swansea, Mass., and George W. Arnold. The latter has disappeared.

Plans have been completed for building the new grain elevator for the Boston & Maine Railroad Co. to replace the one burned last summer at Mystic Wharf, Charlestown (Boston), Mass. The new elevator will be of only about one-third the capacity of the old one, but will embody many improvements which will greatly facilitate the handling of grain. The new structure will have a storage capacity of 500,000 bushels, against 1,500,000 bushels' capacity for the old elevator. It will be built at right angles with the inner side of the wharf and, instead of having the outer end facing the water front, will be side to the harbor. The new building will be built of wood, covered with galvanized iron, very similar to the old one. On the ground it will measure 90x150 feet and its extreme height will be 140 feet. At one end will be the working house, containing the tracks, grain elevating machinery, legs, scales and garners above the bins. The remainder of the house will contain the storage bins. The grain will be handled by belt conveyors. Work on the foundations is progressing favorably. They are of concrete, resting on piles. The motive power for operating the machinery will be electricity, which will be supplied through heavy cable wires from the Boston & Maine Co.'s central power plant in Minot Street. The old elevator was operated by steam power from the power house which stood at the outer end of the wharf and was burned at the time the main building was destroyed. The estimated cost of the new elevator is \$200,000.

CANADIAN.

J. R. Butcher has engaged in the flour and feed trade at Alameda, Assa.

G. T. Somers & Co. have purchased James McCue's grain business at Melancton, Ont.

W. C. McKinnell has bought T. G. Cook's flour, feed and implement business at Teulon, Man.

Caswell & Trevelan have succeeded Thomas Lawrence in the flour and feed business at Hanley, Assa.

A grain elevator and a 90-barrel flour mill will be erected at Swan Lake, Man., by S. P. Hodgson of Headingly, Man.

A company has been organized at Claresholm, Alta., to erect a 30,000-bushel elevator and a 100-barrel flour mill. F. H. Le Quesne has been retained as manager.

The contract for the foundation for the new elevator at Port Colborne, Ont., at the entrance to the Welland Canal, has been let. Ground will be broken in the spring.

It is announced that arrangements have been completed for the shipment of 50,000 bushels of grain, mostly oats, from Winnipeg, Man., to Japan within the next few weeks.

J. S. Myers of Listowel, Ont., a shareholder in the Lucknow Elevator Co. of Lucknow, Ont., has brought an action against the company and two of the directors, F. F. Carr and J. G. Murdoch. He asks the courts to compel the company to transfer on its books some stock he asserts he has purchased. He also asks for an injunction to prevent the company from allotting or issuing any stock under supplementary letters patent granted last

November. The action against the two directors is for an accounting of the profits of operating the elevator under a lease granted to them.

David Horn of Winnipeg, chief grain inspector for Manitoba, has been appointed chief grain inspector for the Dominion. It will be remembered that Mr. Horn was appointed inspector of flour and meal for Manitoba a short time ago at the request of the Winnipeg Board of Trade.

S. McNairn & Co., Ltd., of Toronto, Ont., have been incorporated under the Ontario Companies' Act, with a capital stock of \$150,000, to deal in farm produce, erect, acquire and operate grain elevators, etc. The provisional directors are: J. K. Stroyan, T. L. Carruthers, W. F. Morley, Mrs. J. McNairn and A. H. Dixon.

The Canadian Pacific Railway Co. is said to be about to enlarge King's cleaning elevator at Port Arthur, Ont. The plans are reported to provide for the erection of about seventeen additional storage tanks and the enlargement of the cleaning portion of the plant. The project for the erection of a 2,000,000-bushel elevator at Fort William, Ont., by the Canadian Pacific, as reported in press dispatches, has not gone beyond the rumor stage as yet.

MISSOURI, KANSAS AND NEBRASKA.

F. R. Glascock is reported to have sold his elevator at Garden Plain, Kan.

A. R. Dodge succeeds A. R. Dodge & Co. in the grain business at Langdon, Kan.

Jackson & Bellinger have engaged in the feed and grain business at Chanute, Kan.

The Lowell Shipping Association of Lowell, Neb., may build an elevator at that place.

Albert J. Robinson has sold his grain and lumber business at Arbela, Mo., to Thomas Boltz.

A. L. Jones has sold his grain and feed business at Dekalb, Mo., to the Northrup Milling Co.

Frank Real, formerly of McCook, Neb., has purchased F. S. Cary's elevator at Kenesaw, Neb.

Langdon Bros. have sold their grain and coal business at Gretna, Neb., to Cockrell & Scott.

E. Cloud has sold his elevator at Doster, Kan., to the Caldwell Milling Co. of Caldwell, Kan.

S. R. Overton, grain dealer at Anthony, Kan., is reported to have moved to Wichita, that state.

Louis Thee has sold his elevator and grain business at Morrison, Mo., to Edward Hummert & Co.

The Iowa and Missouri Elevator Co. of Keokuk, Iowa, has purchased the Wilsey Elevator at Wayland, Mo.

The Manley Co-operative Grain Co. has been chartered at Manley, Neb., with a capital stock of \$5,000.

The Logbrinck Grain and Timber Co. has succeeded H. Logbrinck in the grain business at Moselle, Mo.

The Hinds & Lint Co. of Kansas City, Mo., has leased the 300,000-bushel Empire Elevator in the East Bottoms.

G. H. Birchard has the contract for the erection of a 15,000-bushel elevator at Plattsmouth, Neb., for N. J. Murray.

The Farmers' Elevator Co. of Danville, Kan., has been absorbed by the Farmers' Co-operative Shipping Association.

Townsend & Lamon of Andale, Kan., have bought McCrocklin & Co.'s elevator at Derby, Kan., and taken possession.

Work has been started on W. H. Ferguson's new cleaning elevator at McCook, Neb. G. H. Birchard of Lincoln, Neb., has the contract.

It is stated that the Nye-Schneider-Fowler Co. of Fremont, Neb., will erect a 1,000,000-bushel grain elevator in South Omaha, Neb.

A farmers' organization has been formed at South Bend, Neb., to handle grain on the co-operative plan. It has a capital of \$5,000.

It is stated that the Missouri Pacific Railway Co. has offered the newly organized Lincoln (Neb.) Grain Exchange a site for its proposed 500,000-bushel elevator.

The Rock Milling and Elevator Co. of Hutchinson, Kan., has moved its office building from its former location east of the elevator to a point west of the elevator and nearer the business portion of the town.

At Louisville, Neb., the Farmers' Co-operative Grain Association has been incorporated with a capital of \$5,000. The company is now doing a scoop-shovel business, but proposes to erect a flat house near the C., B. & Q. tracks in the near future.

It is stated that the Chicago Great Western Railway Co. may build a 1,000,000-bushel grain elevator at St. Joseph, Mo. If this is not done, the organization of a stock company composed of St. Joseph grain men and capitalists is talked of to

lease and operate the Harroun Elevator at Elwood, a suburb of St. Joseph, which is now being operated by the Burke Grain Co.

R. B. Miller has sold his interest in the Clyde Milling and Elevator Co. of Clyde, Kan., to A. Wangerin and James Sager of Vining, Kan. Mr. Miller retires from the milling business for the benefit of his health and will move to Kansas City, where he will engage in the grain trade.

The South Park Elevator Co. of St. Joseph, Mo., is rebuilding its burned elevator. The new house will have a storage capacity of at least 100,000 bushels and a handling capacity of 50 cars per day. It will be equipped with modern machinery and operated by a 150-horsepower Corliss Engine.

Ground has been broken in the Union Stock Yards Co.'s tract in South Omaha, Neb., for the erection of the Urdike Grain Co.'s new 1,000,000-bushel elevator. Piles will be driven to support the foundation for the new structure. The elevator will be 60x144 feet in size and 165 feet high. The work will be rushed as rapidly as possible and the elevator is expected to be completed by about May 1.

The Merriam & Holmquist Co. of Omaha, Neb., will erect a new elevator in that city with a handling capacity of 100 cars a day. The company's present elevator has a handling capacity of about 50 cars a day and is inadequate to the needs of the business. The negotiations for the purchase of the site are practically closed and work on the new structure will be commenced early in the spring. The working house will be built of wood with iron or steel storage tanks adjoining.

It is announced that the Burlington Railway Co. will rebuild the Harroun Elevator at Harlem, Mo., which was destroyed by fire on January 6. The new house will have a storage capacity of 500,000 bushels and in addition to this provision will be made for the erection of storage tanks later, if desired. When the Harroun Elevator was burned the power plant was saved and will be used to operate the new house. It is said that a company headed by A. L. Harroun will operate the new elevator when it is ready for business.

The Atchison, Topeka & Santa Fe Railway has purchased a 10-acre tract on the north side of their tracks in the Kaw Valley, Kansas City, Kan., as a site for its 1,500,000-bushel elevator. When the Santa Fe made its plan for the seven-mile freight yard from Kansas City to Turner, Kan., it did not provide for the construction of the big tank elevator which J. E. Hurley, general superintendent, announced recently would be built at a cost of \$400,000. When the ground was surveyed for the elevator, six and three-fourths miles west of Kansas City, it was found that there was not enough land to give the space desired for increasing the capacity of the elevator by adding steel and concrete tanks, and the purchase of the above tract was the result. Excavating for the elevator foundation has begun.

The Chicago Great Western Railway Co. will rebuild its Maple Leaf Elevator at Kansas City, Kan., which was burned on January 7. The new plant will be constructed of steel and concrete and will be made as nearly fireproof as possible. It will consist of fourteen storage tanks and a working house. The burned elevator was of frame construction, metal clad. About 150,000 bushels of wheat and about 1,000 bushels of barley were saved as salvage from the ruins of the old elevator. It is said that probably 50,000 bushels of this wheat is very slightly damaged. The grain was loaded on cars and taken to the Gulf Elevator of the Kansas City & Southern Railway to be cleaned. The \$275,000 insurance on the grain, together with the salvage, will about cover the loss on the contents of the elevator. The debris from the burned elevator is being cleared away and it is expected to have the new house ready for operation in time for handling the coming crop. The new elevator will have a capacity of 1,000,000 bushels, and will cost \$150,000. The Barnett & Record Co. of Minneapolis, has the contract.

WESTERN.

The hay and grain business of F. J. Rawlins Jr., at Olney, Colo., is reported sold.

Barrow & Sons are reported to have engaged in the feed business at Winchester, Wash.

Oscar Lampman has succeeded Long & Lampman in the grain, hay and coal business at Montrose, Colo.

Chrisney & Farmer have sold their grain, feed and flour business at Denver, Colo., to Winzer & McDermith.

A. C. Westgate has been admitted to partnership in the grain business at Albany, Ore., conducted by G. A. Westgate.

The Gallatin Valley Grain and Warehouse Co. of Belgrade, Gallatin County, Mont., has filed articles of incorporation, with a capital stock of \$10,000. Among the directors are Mary L. and H. F.

Salyards of Duluth, Minn., and Lyman J. Morgan of Belgrade.

J. W. Pierce is reported to have sold his grain and hay business at Arvada, Colo.

Barron & Son are reported to have succeeded C. C. Leadbetter in the feed and grain business at Quincy, Wash.

The Washington Grain and Milling Co. of Spokane and Reardan, Wash., has purchased a tract of ground, 50x142 feet, in Spokane and will erect a large warehouse.

The wholesale hay and grain firm of Smith & Oliver at Oakland, Cal., has been dissolved. The business has been purchased by E. S. Smith and L. C. Sheldon, who will continue it, A. Oliver retiring.

The total receipts of grain at Seattle, Wash., for 1904 were 4,984 carloads, of which 3,829 carloads were wheat. This is a decrease of 137 cars for 1904 over the preceding year, when the total receipts were 5,121 carloads. The falling off was largely due to the high prices prevailing in other states east, which changed the course of shipments from tide-water to Eastern points.

The Wenatchee Milling Co. of Wenatchee, Wash., is erecting two steel storage tanks, with a capacity of 35,000 bushels each, near its flour mill in that city. The material for the tanks is now on the ground and the work will be rushed to completion as rapidly as possible. The tanks will each be thirty feet in diameter and sixty feet in height. When they are completed the company's storage capacity for wheat will be about double.

I. J. Ballinger of Cheney, Wash., was elected president of the Farmers' Grain and Supply Co. of Spokane, Wash., at a special meeting held on January 24. He succeeds Donald Urquhart of Spokane, who resigned because of other business. John Kunz of Wilbur, Wash., was elected a director to succeed Robert Sheffels, resigned. The company now has about 700 members and operates elevators and warehouses at Spokane, Cheney, Spangle, Rosalia, Thornton, Washtucna, Reardan, Mondovi, Davenport and Wilbur, Wash.

CORN GRADING AT PITTSBURG.

Following are the rules for the grading of shelled corn, adopted by the Pittsburg Grain and Flour Exchange on January 16, 1905, and now in effect:

No. 2 corn shall be sound, clean, plump and dry.
No. 3 corn shall be sound, reasonably clean, and may contain five (5) per cent of damaged or shrunken grains, and when the corn is new it may be slightly damp. In this case the word "new" shall be added.

All cool and sweet new corn that is too damp for No. 3 corn shall be graded "No Grade."

All corn that does not fill the requirements of these grades shall be graded "Rejected."

No. 2 yellow corn shall be No. 2 corn and at least 90 per cent yellow.

No. 3 yellow corn shall be No. 3 corn and at least 90 per cent yellow.

No. 2 high mixed corn shall be No. 2 corn and at least 90 per cent yellow.

No. 3 high mixed corn shall be No. 3 corn and at least 80 per cent yellow.

No. 2 mixed corn shall be No. 2 corn and at least 50 per cent yellow.

No. 3 mixed corn shall be No. 3 corn and at least 50 per cent yellow.

Low mixed corn shall be No. 2 corn and at least 25 per cent yellow.

White corn may be graded the same as yellow by substituting the word "white" instead of "yellow."

The executive committee of the American Seed Trade Association held a meeting at Cincinnati, Ohio, on January 10. The present conditions governing the importation of seeds were up for discussion. The government levies an ad valorem duty of 30 per cent on vegetable seeds, but admits grass seeds duty free. The trouble in the seed trade is this: Foreign seeds are bought on growing contracts, that is, the price is fixed before the seed crop is put in the ground. It not infrequently happens that when the seeds arrive there has been a sharp advance in the prices in this country. Then the customs officials want to collect a duty based upon the quotations for seeds in America at the time. If the importer pays on that basis, of course he loses a good bit of money. On the other hand, a draft accompanies the importation, which is subject to protest, and the importer must meet this at all events. The consequence is that both his money and his seeds are tied up unless he elects to pay duty on the basis indicated. The executive committee of the American Seed Trade Association will endeavor to formulate some plan whereby the inequity complained of may be removed, and when this plan has been agreed upon it will be presented to the treasury department. It is also possible that a bill may be drafted to be introduced in Congress.

The most important consideration is to prevail upon the treasury department to make a ruling whereby hereafter the customs valuation of imported seeds will be based on the contract growing prices. The treasury may be asked to devise a method whereby the importer may give bond for the seeds, allowing them to be released pending the adjustment of any differences between the customs officials and the importer.

DOCKAGE IN THE NORTHWEST.

The annual report of the experiment station of the North Dakota Agricultural College, prepared by L. B. Waldron, M. S., says:

"As there is a general complaint in regard to elevator grades and docking, it was thought a good plan to obtain a number of elevator samples of grain and make a study of them. It was also desired to learn something further in regard to the distribution of weeds, as determined by the weeds seeds found to be present in the samples obtained from widely separate points in the state. To this end some fifty samples of wheat were obtained from different elevators. The purchasing grade and dockage was furnished in each case by the elevator agent.

"In our studies the following points were determined as accurately as possible: The amount and percentage of foreign matter (dockage); the kinds and relative abundance of weeds seed, and the presence of smut balls.

A certain amount of wheat was weighed out from the samples, about seven ounces; and by screening and picking the weed seed was entirely sorted out. This was weighed and by this means the real dockage was easily estimated.

"Forty-seven samples were studied, of which twenty-nine graded '1 Northern,' thirteen '2 Northern,' four '3 Northern,' and one 'rejected.' The elevator dockages ran from one-half pound in a single instance up to two and one-half pounds in one case. There were more dockages at one pound than at any other figure. There were but two samples that were docked less than one pound.

"When the real dockages are compared with the elevator dockages, a marked difference is at once apparent. In only four cases is the elevator dockage less than the real dockage. In the remaining samples, the elevator dockage was always too much, and in many cases the difference was very marked. In one sample, which the elevator docked one pound, the real dockage was found to be only .06 of a pound. This would be a loss of about eighty bushels on 5,000 bushels. The elevator dockage on all the samples averaged 1.26 pounds. The real dockage averaged .64 pound, leaving a difference against the farmer of .62 pound per bushel. Considering these figures as an average for the state, such dockage would entail a loss to the farmers of about 400,000 bushels of grain in one season. One sample, which was docked two and one-half pounds, contained more than eight pounds of foreign matter per bushel. In all cases in which the elevator dockage was too low the wheat was very dirty.

"According to the samples examined, the elevators not only dock too heavily, but they dock unjustly. The cleanest wheat received proportionately the greatest dockage; while the dirtiest wheat received proportionately the least dockage.

"Sixty-six per cent of the wheat samples contained smut balls. This would seem to indicate a certain amount of carelessness in treating seed grain; for it is well known that wheat treated with one pound of standard formaldehyde to forty-five gallons of water will prevent smut from appearing in the crop. The seed grain should be thus treated every year. If the wheat over the state was as much smutted as these samples seem to indicate, it means a greater loss to the farmer than unfair dockage."

Prize ears of seed corn were sold at auction at the Iowa State College at Ames, on January 14, at what are believed to be the highest prices ever paid for this cereal. One ear of corn, the prize winner, was sold for \$11, and the 100 ears which won the \$2,000 premium were sold for an aggregate amount of \$102. Professor J. W. Jones of the Iowa State College was the auctioneer and much enthusiasm and exciting bidding marked this greatest sale of cereals ever known.

The schooled grain bear is a psychological study. He has the cunning of Sir Reynard and the bray of Missouri's chief product. Lacking the courage of the King of Beasts, he has, what is better for his business, the prudence and persistence of the panther. He runs like a coyote from any large loss and therefore lasts to come back again and sniff around for what he considers "his meat." To slightly paraphrase Tom Moore:

"You may break, you may shatter the" bear, if you will—

But he'll "scent" the market "and hang round it still."—Pope & Eckhardt Co. Circular.

COMMISSION

S. J. Feeney has been elected to membership on the Chicago Board of Trade and has opened a commission office in the Royal Insurance Building.

It is announced that, owing to financial difficulties, steps have been taken to wind up the affairs of W. Gibbons & Co., Ltd., grain merchants of Winnipeg.

Bridge & Leonard, Chicago, have been licensed to incorporate, with a capital stock of \$30,000. John R. Leonard, Hubert E. Page and George S. Bridge are incorporators.

H. Holbert & Sons, stock and grain brokers, St. Paul, on February 9 announced that they were in temporary difficulty, as the result of runs started by anonymous rumors.

The Olson-Johnson Co. has been formed at Superior, Wis., to operate the commission business formerly run by O. G. Olson. The new member of the firm is Albert Johnson.

Alfred L. McDougal has engaged in the brokerage business at Chicago on his own account. He was for many years with Otto E. Lohrke & Co., and later with their successors, Knight & McDougal.

Articles of incorporation have been filed by the Merchants' Grain Co. of Chicago. The capital stock is \$5,000 and the incorporators are John G. Walters, William H. Moorehead and Henry H. Freeman.

The W. D. Judd Commission Co. of East St. Louis, Ill., has incorporated with a capital stock of \$10,000 to do a grain and commission business. The incorporators are W. D. Judd, John J. O'Rourke and Charles L. Painter.

The A. C. Martin Co., Detroit, Mich., has filed articles of association to deal in grain and stocks. Capital stock is \$50,000, of which \$25,000 has been paid in cash. Stockholders are A. C. Martin, F. E. Hewitt and R. C. Strutt.

Frank Harlow, of the Chicago Board of Trade firm of Frank Harlow & Co., recently filed a petition in bankruptcy, with liabilities of \$37,000. The firm is said to have lost \$10,000 in a July wheat deal. The assets are estimated at \$8,000. Ulric King was named as receiver.

The membership of Lloyd R. Torgerson on the Chicago Board of Trade has been posted for transfer. Mr. Torgerson has been connected with the Board for a number of years. He is said to have made \$100,000 in the July corn deal of 1902, but of late has not been so successful.

At Toledo, Ohio, the C. L. Maddy Co., capitalized at \$45,000, has incorporated to do a general grain business. The incorporators are Charles L. Maddy, James E. Churchill, F. L. Geddes, Arthur W. Bruce and Thomas J. Cunningham. The company has been in business, for some time and the only change is the admission of James E. Churchill.

Creditors of Geo. H. Phillips, Chicago, at the time of his failure in April, 1902, have received 45 per cent of their claims; a total of \$74,358 have been distributed. A statement issued by Ulric King as trustee shows that \$85,771 has been paid out in dividends, legal and other expenses, and the trustee has \$2,093 cash on hand. He adds: "Prospects for further material collections are not very promising."

The White & Rumsey Grain Co. has been incorporated at Chicago with a capital stock of \$30,000, to do a general grain commission and grain shipping business. The incorporators are: I. P. Rumsey, of Rumsey & Company, one of the oldest members of the Chicago Board of Trade; George A. White, formerly of Churchill-White Grain Co. and late of the United Grain Co., and Henry B. Gould. Offices will be at 97 Board of Trade Building.

A new brokerage and commission firm, to be known as Piper, Johnson & Co., has been formed in Minneapolis and will do business on the Chamber of Commerce. George F. Piper, vice-president of the Chamber, will be the head of the firm. Denman F. Johnson, Minneapolis representative of Finley Barrell & Co., Chicago; Walter D. Douglas of Cedar Rapids, Iowa, and E. C. Warner, president of the Midland Linseed Oil Company, will also be partners.

Arthur May & Co., grain exporters, have moved their office from 210 Produce Exchange, New York, to 324 Board of Trade Building, Montreal. The business will be carried on as heretofore by Arthur May & Co., with head offices at Durban, Natal, and branches at East London, Delagoa Bay and Johannesburg, South Africa, and Montreal, Canada. The English office will be carried on as for many years by Collier & Son, who have removed their office for the more convenient handling of export

business to 4 Lloyds Avenue, Fenchurch Street, London, E. C.

F. S. Ackerman, formerly with Counselman & Day, Chicago, was on January 16 admitted to partnership in the firm of S. H. Woodbury & Co.

Postlewait & Co. have succeeded J. F. Sprague & Co. in the grain brokerage business at Decatur, Ill. The new firm will occupy the rooms in the Merchants' Exchange formerly occupied by the grain department of the American Hominy Co. S. M. Postlewait, head of the new firm, was formerly in the grain business at Milmine, Ill. Later he was located at Jamaica, Ill., and more recently was in the same line at Rossville. He will move his family to Decatur and buy property in that city.

VALUING BREWING BARLEYS.

[From a treatise on brewing barleys, prepared with a view of improving the quality of the brewing barley of this country, by R. Wahl, director of the Wahl-Henius Institute of Fermentology, of Chicago.]

The question of the correct valuation of brewing barley, either according to physical properties, or by chemical analysis—that is, chiefly by the percentage of starch and albumen—is one of the most important that can be submitted to a maltster. Opinions differ not only regarding the value of the external marks noticeable by simple observation, as odor, color, size and weight of berry, thickness of husk, mealiness or glassiness of the starch, but also regarding the significance of the chemical composition, a high percentage of starch, with a low one of albumen, for instance, being considered as desirable in most countries; whereas in America brewers use barleys so rich in albumen that they would be absolutely condemned if judged by the European standard. Would such condemnation be justifiable?

It is still customary in all countries to value barley by external marks, and not until lately has a beginning been made in Germany to take more account of the estimation of the nitrogen or albumen in buying barley.

How easy it is to make mistakes in the valuation of barley when observing only the external or physical properties, is shown by the fact that the cultivation of barley in Germany has greatly declined of late years, and a considerable part of the barley used in Germany is being imported from abroad, chiefly from Bohemia. The reason, according to authorities in Germany, is that brewers, maltsters and farmers erred so completely in estimating barley by external marks only that a large part of the barleys grown in Germany and considered excellent according to external marks proved quite unfit for brewing, the beer produced from them not satisfying the demands of the consumers.

Dr. Bauer says: "The deterioration of German barleys, besides the impoverishment of the soil with respect to potash, by forced cultivation, is due entirely to the system of valuation by external marks. This system allowed too much scope to individuality and produced great mistakes, which perplex and annoy the farmer, but do not encourage him."

And how is it proposed to meet the difficulty in Germany? By adopting the proposal made by George Haase, one of the foremost experts of Germany, namely to consider the percentage of albumen in the barley in estimating its value. Dr. Bauer, in the address quoted above, says further:

"Mr. Haase is entitled to the credit of having secured recognition for, and called the attentions of brewers and maltsters to the question of quality, which depends upon a high percentage of starch and a low percentage of albumen. Hitherto a prejudice has prevailed against heavy barleys, that is, those rich in starch, because experience was said to show them difficult to malt. The significance of this experience was reduced to this, that the difficulty in malting was due to a high albumen content, and is common to all highly albuminous barleys. Barleys low in albumen and high in starch malt very finely. Lintner asserted twenty years ago that a good brewing barley must not contain above 10 per cent of albumen, which is the percentage found in Bohemian barleys."

Thus, Haase considers a barley less valuable for brewing in proportion as its percentage of albumen increases above 10 per cent. Accordingly a good brewing barley should be without odor; that is, sound, with a high germinating energy, properly thrashed, of good color, rich in meal and poor in albumen, that is, not above 10 per cent; on the other hand, this system of Haase does not take account of the condition or mealiness of the endosperm. It does not attach to hardness of the starch body so great an importance as was hitherto done. As to the size of berry the system also departs from the current view which prevails more particularly in South Germany, where barleys of medium size and weight only are valued.

THE EXCHANGES

The Montreal Board of Trade held its annual meeting on February 1.

Chicago Board of Trade memberships are changing hands at \$3,100 net to the buyer.

The new Grain Dealers' Club of Cincinnati held a banquet and social session on the evening of January 31.

The grain board of the San Francisco Merchants' Exchange is now doing business on the main floor of the Exchange Building.

It is probable that the directors of the Chicago Board of Trade will be asked to establish a blacklist of persons who have victimized commission houses.

The amendment to the rules of the Toledo Produce Exchange, which provides that non-members must appear before the arbitration committee of the Exchange on complaint of a member, is now in effect.

The rate for inspecting grain into store at Chicago has been reduced from 50 cents to 35 cents per car. The order was issued by the chief inspector in justice to shippers routing grain direct over the Chicago Junction Railway.

The following delegates were appointed by the Chicago Board of Trade to attend the meeting to urge the ratification by the Senate of arbitration treaties: Walter Fitch, John B. Adams, J. Herbert Ware, J. F. Harris, G. F. Stone.

New officers of the Baltimore Chamber of Commerce are: President, Douglas M. Wylie; vice-president, Ferdinand A. Meyer; treasurer, John L. Rodgers; secretary, Henry A. Wroth; assistant secretary and cashier, James B. Hessong.

At the meeting of representatives of the various exchanges held in New York on February 9 to consider grain rates, the interests of the Chicago Board of Trade were looked after by J. T. Sickel, James Pettit, G. E. Marcy, E. L. Glaser and James Bradley.

It has been resolved to print all decisions of the Chicago Board of Trade violation of rules committee. Decisions now in effect will be printed and decisions made in the future will be printed annually. This has been found necessary, owing to the number of rulings that have been made by this court.

A joint committee representing the Chicago Board of Trade, the Chicago Shippers' Association and the Illinois Manufacturers' Association has agreed upon a strong resolution, to be forwarded to the President and to Congress, urging that the Interstate Commerce Commission be given greater powers in the adjustment of freight rates.

The new grain rules of the Cincinnati Chamber of Commerce, which went into effect on January 1, were, before the end of the month, entirely suspended and the old rules revived pending a revision of the new ones. The grain committee has now completed the work of revising the rules and they have been presented to the directors for adoption.

The following have been named to serve on the wheat committee of the Baltimore Chamber of Commerce: Charles C. MacGill, George S. Jackson and Walter Kirwan. These, with John A. Dennis and Hiram G. Dudley, will constitute the committee as a whole. Blanchard Randall, James A. Clark and William H. Heyward, who were recently elected to the board of directors, and who were on the wheat committee, resigned because they were not eligible.

At a meeting of the directors of the St. Louis Merchants' Exchange, on February 1, the following resolution was unanimously adopted: "Resolved, That the board of directors, in reappointing George H. Morgan as secretary for the ensuing year, desires to make special record of the fact that the present year marks the fortieth anniversary of Mr. Morgan's first appointment to that position and that the board hereby expresses to Mr. Morgan its high appreciation of the conspicuous fidelity, energy and efficiency with which he has discharged the duties of the office during the forty consecutive years that he has served the exchange as secretary, a record of service which is believed to be without a parallel in the history of any organization similar to this exchange. The board congratulates Mr. Morgan upon his enviable record and extends to him its heartiest good wishes for the future."

ELECTION AT WINNIPEG.

At the recent election of the Winnipeg Grain and Produce Exchange the following officers were chosen by acclamation: President, John Love; vice-president, Capel Tilt; secretary-treasurer, C. N.

Bell. A. R. Hargraft, the retiring president, reviewed the activities of the Exchange for the year and pointed to the conspicuous success of the option market, which was established last year.

DULUTH BOARD OF TRADE.

Officers of the Duluth Board of Trade, elected on January 17, are: President, John Miller; vice-president, George Spencer; directors, G. S. Barnes Jr., J. H. Barnes, J. H. Cook and H. F. Salyards.

According to the Commercial Record, the Board is in excellent condition financially. Judging by past results, it is expected to reduce the indebtedness to \$25,000 by January 1, 1907. This will leave the Board in possession of a magnificent property, easily valued at \$450,000, and having a net income in excess of \$25,000, after paying expenses for conducting the association proper, quotations, etc., about \$10,000 yearly, it should leave \$15,000 yearly applicable for dividends.

BOSTON CHAMBER OF COMMERCE.

The Boston Chamber of Commerce held its annual election on January 17, when President Henry M. Whitney was re-elected. In addition to re-electing Mr. Whitney the Chamber keeps in office Vice-Presidents John T. Crocker and Daniel W. Ranlet. The new directors are Gardner E. Murphy, Mark Shultis, Harry J. Wood and John Wyde.

In opening the annual meeting of the Chamber, Mr. Whitney reviewed the career of the organization during 1904. The year was not a notable one, he said, and was rather a poor one for Boston commercially. The Chamber's work in the interest of reciprocity with Canada was carried on vigorously, but without results to date. The Chamber has taken an interest in the railroad differentials hearings and hopes for good results from them for Boston.

The annual report of the Chamber was then read by the secretary, Elwin G. Preston. It shows Boston has suffered in exports of grain recently, the average for the past three years being but 12,700,000 bushels, as compared with 35,000,000 in 1901. The decline of Boston has been more marked than at other Atlantic ports, owing largely to the operation of inland freight differentials in favor of the ports of Philadelphia, Baltimore and Newport News. The Chamber has urgently advocated the abolition of these differentials.

TOLEDO PRODUCE EXCHANGE.

The new officers and standing committees of the Toledo Produce Exchange are: President, E. L. Southworth; first vice-president, F. O. Paddock; second vice-president, C. L. Cutter; secretary, F. W. Hamley. Committees: Finance, F. I. King, F. J. Reynolds, C. L. Cutter; judiciary, C. S. Coup, C. S. Burge, J. J. Coon; transportation, W. H. Morehouse, F. O. Paddock, F. J. Reynolds; quotations, F. I. King, J. E. Rundell, F. W. Jaeger; telegraph, F. J. Reynolds, C. S. Burge, F. W. Jaeger; supplies, W. E. Cratz, E. W. V. Kuehn, C. S. Burge; elevators, C. L. Cutter, F. O. Paddock, F. I. King; rules floor and call board, C. S. Burge, C. S. Coup, E. W. V. Kuehn; claims, F. O. Paddock, J. J. Coon, W. H. Morehouse; rooms, J. E. Rundell, W. H. Haskell, F. I. King; employes, W. H. Haskell, C. S. Burge, W. E. Cratz; harbor, J. J. Coon, F. J. Reynolds, C. L. Cutter; weights, F. W. Jaeger, F. J. Reynolds, W. H. Morehouse; wheat inspection, J. J. Coon, F. O. Paddock, C. L. Cutter, J. C. Keller, F. J. Reynolds, Fred Mayer, George B. McCabe; corn, oats and rye inspection, James Hodge, C. L. Reynolds, E. L. Southworth, J. E. Rundell, W. H. Haskell, H. L. Goemann, H. A. De Vore; seed inspection, F. W. Annin, J. C. Keller, C. S. Burge, E. W. V. Kuehn, F. W. Jaeger, R. L. Burge, W. E. Cratz.

E. H. Culver has been reappointed chief grain inspector, with Dan Blankmier as assistant. H. Wallace Applegate is assistant secretary.

LINCOLN GRAIN EXCHANGE FORMED.

For some time the grain interests of Lincoln, Neb., have been agitating the question of establishing a grain exchange, and on February 6 a meeting was held at which the Lincoln Grain Exchange was organized.

Fifty shares of stock at \$100 each were subscribed for, a board of nine directors chosen and an organization of the board effected. The board of directors were recommended by a committee composed of Alex Berger, H. O. Barber and J. W. McDonald. It is composed of the following: For one year, Alex Berger, F. M. Hall, E. N. Mitchell; for two years, W. H. Ferguson, W. T. Auld, U. G. Powell; for three years J. E. Miller, John B. Wright, S. H. Burnham.

The board met at the close of the meeting and elected the following officers: John B. Wright, president; W. H. Ferguson, first vice-president; U. G. Powell, second vice-president; Alex Berger, treasurer; F. D. Levering, secretary. A committee composed of Messrs. Berger, Hall and Powell

was appointed to draw up by-laws and present them at the next meeting of the board.

The preliminary meeting was called to order by Alex Berger, who, in explanation of the meeting, said that for the last few months a large number of grain firms have been moving to Lincoln until now there are fifteen or sixteen of them. He stated that it is proposed to build an elevator with a capacity of half a million bushels for benefit of grain dealers over the state who desire to store their grain at Lincoln. For this grain receipts will be issued which will be negotiable and accepted as collateral by any bank. He said the policy of the exchange would be toward conservatism and that the standard must always be kept high.

ANNUAL REPORT AT CHICAGO.

The annual business meeting of the Chicago Board of Trade was held on January 16, at which time Secretary Stone read the annual report, showing a cash balance on hand at the end of the fiscal year of \$145,009 against \$44,196 on January 5 last year. Of the reports of the departments, that of the new transportation bureau, established to secure more suitable freight rates in Chicago, aroused the greatest interest. It said in part:

"Continuous changes in rates and rules of transportation companies, and especially in the territory tributary to this market, render necessary close attention upon the part of this organization in order that not only the discriminating features shall be removed but others prevented. The formation in other centers of organizations devoted to securing from railways adjustments in rates that will inure to their benefit necessarily to a greater or less extent, adversely affects the interests of this city. Territory heretofore accessible to Chicago now is successfully invaded by competitors, and in some instances, with more favorable rates, almost exclusively controlled by them. This also is true with regard to other lines of business in Chicago that feel the necessity of joint action for the purpose of securing consideration from common carriers, so that inequalities might be remedied.

"With the cordial co-operation of the members the directory is confident changes of such vital character in relation to transportation affairs will be effected as will prove mutually advantageous to the members of the board and to transportation lines."

Of the work of the new department of grain sampling and seed inspection the report said:

"One of the many important reasons for establishing this department was the desire on the part of the directors to regard and re-establish the entire confidence concerning the inspection and sampling of grain in the Chicago market of the Western shipper whose grain is sold largely by sample on our exchange, and also of the Eastern buyers who must, from the nature of the business, depend largely upon some disinterested party to see that the grain shipped on their orders is properly graded and the quality is fully up to the specifications of their contracts. With this in view a thoroughly competent and experienced grain expert has been appointed chief sampler, and he has associated with him a first assistant and between twenty and thirty deputy samplers.

"From the general indorsement received it is believed a step has been taken in the right direction."

The standing committees for the year, as announced by President Jackson, are: Executive, Adams, White, Jones; finance, Patten, Sickel, Andrew; real estate, Tietgens, Adams, Comstock; rules, Crighton, Barrel, Adams; legal advice, Bradley, Ware, Patten; room, Jones, Crighton, Wagner; membership, Jones, Tietgens, Andrew; warehouse, Wagner, Bines, Sickel; grain, Sager, C. B. Pierce, B. A. Eckhart, Edward L. Glaser, William N. Eckhardt; clearing house, Barrel, Wagner, Sickel; market report, Fitch, Bradley, Ware; violation of rules, Bines, Ware, Patten, White, Barrel, Andrew; transportation, Sickel, Harris, Patten, Bradley, B. A. Eckhart, E. L. Glaser, J. J. Bryant, E. L. Merritt, Richard Gambrill; weighing, Ware, Crighton, Harris; claims, Andrew, Comstock, Bines; meteorological observation, Adams, Tietgens, Jones; provision inspection, White, Tietgens, J. A. Bunnell, John Roberts, Charles Berrell Jr.; flour inspection, B. A. Eckhart, Isaac Horner, R. S. Johnston, Jacob Mansar, Frederick Dickinson; flaxseed inspection, Sager, T. M. Hunter, George E. Alt, P. H. Eschenburg, J. H. Milne; other inspection, Comstock, Fitch, Harris; arbitration on grass and field seeds, T. M. Hunter, F. E. Winans, George A. Wegener, C. A. Heath, G. S. Green, A. Gerstenberg, A. L. Somers; legislation, Harris, Adams, Fitch, Ware, White.

Heads of departments are: E. A. Hamill, treasurer of the Board; J. C. Black, treasurer of the clearing house; Samuel Powell, manager of the clearing house; J. F. Lee, assistant manager of the clearing house; J. A. Tobey, provision inspector, registrar and weighmaster; C. F. Lias, flax inspector and registrar; John Garrick, assistant flax inspector; R. P. Kettles, chief grain sampler; A. R.

Ware, assistant to Mr. Kettles. Henry A. Foos, chief weighmaster, and John T. Canvin, chief flour inspector, have been reappointed. The directors also reappointed George F. Stone secretary of the Board and Henry S. Robbins attorney.

PHILADELPHIA'S ANNUAL ELECTION.

At the annual election of the Philadelphia Commercial Exchange, on January 29, the following officers and directors were named: President, James L. King; vice-president, William J. Koch; treasurer, Samuel C. Woolman; directors to serve two years, William R. Cornell, William McAleer Jr., Penrose A. McClain, A. Judson Stites, Clarence W. Wagar and Watson W. Walton; directors to serve one year, Joseph Bosler and George M. Warner. Charles F. Saunders was subsequently elected secretary.

Walter F. Hager, the retiring president, in presenting his report, said:

"Owing to the poor condition in which the corn crop of 1903 was harvested, the exports of that cereal from the United States during the year just passed were only one-half the quantity of the previous year, which also was not a good one.

"The disasters attending the wheat crop of 1904 are well known, and as a result conditions have been introduced into the trade practically unknown before. Wheat has been brought to supply Eastern mills all the way from the Pacific Coast, while Canadian wheat has been imported for domestic milling in spite of the tariff of twenty-five cents a bushel to which it is subjected. Under such circumstances export of wheat has been practically at a standstill, the little that was done during the year being almost altogether from the Gulf and the Pacific Coast."

Regarding the outlook this year, particularly in the corn trade, he said:

"The corn crop of 1904 would appear to be a large one and of exceptionally good quality. The export season began auspiciously, promising a resumption of active shipments in which members of the Exchange would duly participate. Unfortunately, however, the rates of freight charged by the rail lines feeding the Gulf ports have been made on a basis that has been diverting thither so large a proportion of the corn export as to have awakened general protest on the part of the Atlantic Coast exporters. The board of directors of the Exchange has appealed to the railroad companies entering Philadelphia to make such rates of freight, without delay, as will permit Philadelphia to get the share of the traffic to which it is entitled."

President-elect King, in his inaugural address, advised the establishment of a hay and straw inspection department on the same basis as the grain inspection. He also took up the subject of freight rates, asserting that the question of equal rates and the abolition of rebates is uppermost in the minds of shippers and receivers to-day. He declared that the Commercial Exchange stood ready to offer every assistance in its power to President Roosevelt in his determination to see that all shippers, whether large or small, are placed on an equal footing and given a fair opportunity to compete for business.

Referring to the matter of an increase in the export grain trade at Philadelphia, Mr. King said that the powers of the Interstate Commerce Commission should be increased so that some system might be established for the equalization of freight rates between the Gulf ports and the Atlantic seaports, in order to give exporters in each section equal chance to compete for the grain trade of the world.

The Toledo Produce Exchange has adopted resolutions expressing confidence in the probity of E. P. Bacon and protesting against his treatment by certain members of the house committee on interstate commerce.

A non-practicing lawyer of North Dakota is advocating an act to provide for a state insurance fund for the payment of losses to growing crops, partially damaged or totally destroyed by hail. This measure has been intermittently promoted in North Dakota in the past, but only received a half-hearted support and has never been seriously debated. Under the conditions of the act, farmers would insure themselves against crops being destroyed by hail at a premium of 10 cents an acre, the money collected in this manner to be set aside by the state treasurer as a special fund for the payment of losses, which would be appraised and adjusted by the board of county commissioners for each county. There is nothing in the act that will prevent any person from insuring his crops against loss by hail in any other company, and such insurance would not be considered in any adjustment made under the provisions of the act. The last section of this proposed measure provides that when a surplus of \$400,000 shall have been attained, after the payment of all losses due, the amount of tax to be levied the following year shall only be 5 cents an acre.

THE GRAIN TRADE OF BALTIMORE.

[From an article by Charles England, ex-president of the Baltimore Chamber of Commerce, published in the Baltimore Merchants' and Manufacturers' Journal for December, 1904. Reprinted by permission of the author and the journal named.]

The water power of the Patapsco River, Gwynn's and Jones' falls, were not alone instrumental in building up the milling industry of Baltimore. Situated then, as now, within a section producing the finest wheat grown in the world, the chief incentive for the establishment of flour mills was the availability of Maryland grain, and this was also the foundation of the grain business, which steadily grew and kept Baltimore continuously in the front rank of the grain trade of the United States. In the early records of the colony tobacco and grain are spoken of as the principal products; especial importance was given to tobacco because it was then the purchasing medium, and we read that one hundred pounds of tobacco was, in those days, the price of a wife, one hundred and fifty pounds of tobacco being regarded as proper compensation for a damsel possessing extraordinary attractions. The first grain exported by the colonies was from Baltimore in 1726, four years before the incorporation of "Baltimore Town," and, generally speaking, from that time up to the present, except during the wars of the Revolution and of 1812, there has been a regular movement of grain through this port to Europe. The early receipts of grain came from adjacent sections, and by small craft from numerous points tributary to Baltimore by water. The making of stone roads, or pikes, later brought supplies from the country North and West, and the construction of the National Pike by the United States government westward to the Ohio River opened up a large section to the Baltimore market.

In 1828 the Baltimore & Ohio Railroad was incorporated and was completed to the Ohio River in 1853. This was followed by the construction of the Susquehanna Railroad (now the Northern Central), which brought to Baltimore the products of the fertile Cumberland Valley in Pennsylvania. From this time the grain trade of Baltimore increased in proportion to the production of grain in this country. At first the business for the most part was handled in private warehouses reached by the tracks of the Baltimore & Ohio Railroad along Pratt Street, and the tracks of the Northern Central Railroad on Howard, also North streets. The grain for export was loaded into vessels of Bowley's wharf and the adjacent docks, and occasionally at Fell's Point.

If space would permit the introduction of statistics they would show a steady and remarkable growth in Baltimore's grain business, even before the erection of elevators. In 1867 the first elevator was built by J. N. Gardner, who came from Buffalo, N. Y. This was situated at Jackson's wharf, and was a small transfer house without storage capacity. It was later removed to Canton Hollow. About this time the Baltimore & Ohio Railroad had completed extensive terminals at Locust Point, and the merchandise piers were used for unloading cars of grain. The grain was carried across the piers in bags by laborers, who would empty it into the vessel's hold. The continued increase of the business made this process too expensive and tedious, and J. N. Gardner, who had operated the small elevator at Jackson's wharf, leased from the Baltimore & Ohio Railroad one of the elevated coal piers at Locust Point and equipped it with scales to weigh the loaded cars, and with chutes to run the grain into the vessels lying under the pier.

In 1872 the Baltimore & Ohio Railroad erected at Locust Point the first fully equipped elevator, known as Elevator "A," having a storage capacity of 500,000 bushels. This was really the pioneer elevator on the Atlantic seaboard. In 1874 the same company erected Elevator "B" at Locust Point, with a storage capacity of 1,500,000 bushels. In 1875 the Baltimore Elevator Company built Elevator No. 1 on the north side of the harbor. In 1878 J. N. Gardner built an elevator of 100,000 bushels' capacity at the foot of Fifth Avenue, Canton. In 1879 the Baltimore Elevator Company built Elevator No. 3 at foot of Fifteenth Street, Canton. In 1881 the Baltimore & Ohio Railroad built Elevator "C," having a storage capacity of 1,800,000 bushels, and subsequently both the Baltimore & Ohio and Northern Central railroads built elevators at their uptown terminals to accommodate the local trade. The present elevator storage capacity in this city is about 5,500,000 bushels, and in addition there are several floating elevators which have a total handling capacity of 20,000 bushels per hour.

The grain trade of Baltimore, starting with the small cargo exported in 1726, has grown steadily to the present time, and taking the average figures for the past seven years, they show annual receipts of 34,311,074 bushels of corn, 13,834,187 bushels of wheat, 6,338,770 bushels of oats, 2,179,600 bushels of rye, or a total of 56,663,641 bushels of grain re-

ceived annually. Upon the same basis the annual exports have been 31,970,321 bushels of wheat, 11,531,656 bushels of corn, 2,993,564 bushels of oats, 1,683,120 bushels of rye, a total annual exportation of 48,178,661 bushels.

Even a brief history of the grain trade of Baltimore would be incomplete without some reference to the Baltimore Chamber of Commerce and its predecessor, the Corn and Flour Exchange. The Baltimore Corn and Flour Exchange was organized in 1851, but its affairs were conducted somewhat irregularly until 1853, when it was duly incorporated. A warehouse, No. 76 Bowley's wharf, was rented and fitted up to accommodate the business. On March 10, 1859, it was decided to purchase the lot at the corner of South and Wood streets, and the same year the erection of a building thereon was commenced; it was formally opened May 1, 1860. During the Civil War excitement ran high, resulting in a split in the membership, and in January, 1862, the Union members retired from the Exchange and founded a new organization, which was chartered on the thirtieth of that month as the Maryland Corn and Flour Exchange. Rooms were fitted up in the Hooper Building, southeast corner of Pratt and South streets. The new Exchange, however, maintained its separate organization only a few months, when its members reunited with the old association. In 1880 a building company was formed under the name of the Chamber of Commerce Building Company, and the Chamber of Commerce Building at Holliday and Water streets was commenced in that year. The Corn and Flour Exchange moved into this building in November, 1882. In 1896, the charter of the Corn and Flour Exchange was amended, changing its name to the Baltimore Chamber of Commerce, as being more appropriate on account of the varied interests represented in its membership, the new name also being in accord with the building it occupied. This handsome building was destroyed in the great conflagration of February 7 and 8, 1904, but is now being rebuilt, the cornerstone having been laid on November 5, with impressive Masonic ceremonies.

The undaunted spirit and energy which is characteristic of the grain trade of Baltimore was illustrated in the action of the Chamber of Commerce on the morning of February 8, 1904, during the great fire. The Chamber of Commerce Building was burned about 3 a. m. of that day, and about the same time the business homes of nearly all the grain trade. The business section of the city was in ruins, magnificent buildings once occupied by prominent financial institutions were no more, men knew not whether to reckon themselves solvent or bankrupt, stout-hearted men were stunned, dazed beyond being sensible of a realization of what could happen under such conditions. In the midst of this uncertainty, while the fire was still raging to the eastward, as many members of the Chamber of Commerce as could then be gathered met in a room in the Hotel Rennett, and, after acknowledging many messages of sympathy which had been received from every section, it was unanimously decided to immediately secure temporary quarters, and committees were appointed to secure a suitable place, also arrange for a restoration of telegraphic service; and before the fire had burned itself out at the water front, quarters in the Masonic Temple were secured and telegraph wires run into the building. On the next morning business was regularly resumed and during the early session 100,000 bushels of grain were sold for export to Europe.

OUR CALLERS

[We have received calls from the following gentlemen prominently connected with the grain and elevator interests during the month.]

B. G. Randall, Taos, N. M.
J. R. Hamacher, Windsor, Mo.
Fred. Friedline, Little Rock, Ark.
Chas. E. Saunders, Ottawa, Ont.
J. H. Smelzer, Montreal, Quebec.
M. A. Carleton, Cerealist U. S. Department of Agriculture, Washington, D. C.
Fred Mears, representing Indiana Millers' Mutual Fire Insurance Co., Indianapolis, Ind.

The tonnage of freight going through the Soo locks during navigation season of 1904 was 31,545,106, against 34,674,437 in 1903, a decrease of 3,129,331, an amount surprisingly small, considering the two months' delay after the opening of navigation caused by the masters and pilots' strike. Grain other than wheat shows an increase of 3 per cent over last year. The vessel passages numbered 16,120; the net tonnage is reported at 24,364,138.

FIRES--CASUALTIES

The premises of James H. Davis, dealer in grain and hay at Louisville, Ky., were recently damaged by fire.

A grain warehouse at Fayette, Ohio, owned by L. A. Baker, a local hay and grain dealer, was destroyed by fire of unknown origin on January 17.

The Farmers' Elevator at Montrose, S. D., was damaged by fire to the extent of about \$300 on January 24. A defective chimney caused the blaze.

The Eggen Elevator at Vienna, S. D., caught fire on January 21 from a stove in the office, but the blaze was extinguished before much damage was done.

The grain elevator at Batson, Ohio, owned by Brady Bros. & Sullivan, was burned on the night of January 29. The loss is \$10,000; insurance \$9,000.

G. A. Knight & Son, hay, grain and feed dealers at Houston, Texas, recently sustained a loss by fire of \$5,000. There was \$3,000 insurance on the property.

William F. Nicholas' feed mill and hay and grain warehouse at Hopkins Station, Mich., were burned on February 2. The loss is about \$7,000; insurance, \$2,000.

The roof of the office at A. H. Edward's elevator at Tolono, Ill., caught fire on January 26, but the blaze was discovered and extinguished before much damage was done.

The floating grain elevator Empire at Philadelphia, Pa., was destroyed by fire at an early hour on the morning of January 31. The Empire was owned by Moore & Co., and was moored at Pier 34, South Wharves.

A small fire in A. J. Richard's grain store at Quincy, Mass., on February 3 was discovered and extinguished before much damage resulted. A spark from a passing locomotive is supposed to have caused the blaze.

Fire of supposed incendiary origin damaged the grain and hay warehouse of Moloney & Carter at the Southern Railway yards in Charleston, S. C., to the extent of about \$10,000 on January 31. The loss is covered by insurance.

A warehouse at Stratford, Wis., owned by the H. E. McEachron Co., millers, was partially destroyed by fire recently. The entire roof was burned away and the grain, flour and feed stored in the building was damaged by water.

One side of the new elevator at Garber, Ill., gave way on January 9, allowing over 5,000 bushels of corn to run out upon the ground. The storing of corn in the elevator before it was properly rodded caused the collapse of the wall.

The main elevator at the Liberty Mills in Nashville, Tenn., was burned on the night of February 8, causing a loss estimated at \$67,650. About 5,000 bushels of wheat were destroyed. The company carried \$129,000 insurance on its plant and \$91,000 on stock.

The Smith-Hippen Co.'s elevator at Leslie Station, about five miles east of Pekin, Ill., was destroyed by fire on January 16. It contained about 7,000 bushels of grain. The loss on the elevator and contents is estimated at \$10,000, partly covered by insurance.

J. C. Kendall's grain elevator at Childress, Texas, was destroyed by fire of supposed incendiary origin at about midnight on January 13. The loss is \$4,000, with \$3,000 insurance. The elevator was the only one in the town and will be rebuilt at once.

A Santa Fe freight locomotive jumped the track at Red Rock, Okla., on January 12, and crashed into the elevator owned by the Arkansas City Milling Co. of Arkansas City, Kan. The elevator was moved nearly two feet off its foundation and a large quantity of grain spilled out upon the ground.

The Bosch-Ryan Grain Co.'s grain elevator and malting plant at Cedar Rapids, Iowa, were destroyed by fire on the night of February 7-8. The fire was discovered at about 11 o'clock p. m., and is supposed to have started in the engine room. The loss is estimated at \$200,000. There was \$62,500 insurance on the plant and \$6,500 on grain.

The large warehouse of the Mahone-Henley Grain Co. at Marshall, Texas, was burned on January 20. The fire was discovered at about 8:45 o'clock p. m. Owing to the fact that no hydrant was located near enough to the building to be available, nothing could be done to save it from destruction. The warehouse was 40x140 feet in size and was new, being completed last fall. It contained about thirty-three carloads of hay and a quantity of other stock. The loss on the building is estimated at

\$1,500 and the loss on its contents \$4,000. There was \$750 insurance on the warehouse and \$1,900 on its contents. The origin of the fire is unknown. The company will rebuild at once.

The Western Elevator Co.'s elevator at Claremont, Minn., together with about 10,000 bushels of grain, was destroyed by fire on the evening of January 23. The loss is estimated at \$10,000, fully covered by insurance. The fire is supposed to have caught from a defective flue in the office chimney. The elevator had a capacity of 25,000 bushels and will probably be rebuilt.

The grain elevator at Lake Cicott, Ind., owned by Marion Million & Son, was destroyed by fire on the night of January 28, causing a loss of \$10,000, partially covered by insurance. The fire broke out at about 10:30 o'clock p. m., and is supposed to have been started by a hot journal. The elevator was in operation on the day of the fire. The town has no fire protection and nothing could be done to check the flames.

The Alfalfa Meal Co.'s plant at Omaha, Neb., was destroyed by fire on February 2. The fire broke out at 6:45 o'clock p. m., and was caused by the explosion of a lantern on the second floor of the building. The company's loss is \$25,000, with \$10,000 insurance. A portion of the building was occupied by the International Manufacturing Co., manufacturers of cooperage. This concern sustained a loss of \$7,500, covered by insurance. The building is owned by other parties.

The 30,000-bushel elevator at Henry, S. D., owned by the Western Elevator Co., was burned to the ground on the night of January 27. A small dwelling and four C. & N.-W. box cars, two of them containing grain, were also burned. There were about 27,000 bushels of grain in the elevator at the time of the fire. The origin of the fire is unknown, but incendiaryism is suspected. When the fire was discovered at 1:30 o'clock a. m., it had gained so much headway that the plant was past saving.

The Pacific Coast Elevator Co.'s grain elevator and warehouse at Diamond, Wash., on the O. R. & N. Railway, was burned on the night of January 24, causing a loss estimated at \$30,000 to \$35,000. The building contained 35,000 bushels of wheat, of which 20,000 bushels was owned by the company, the remainder belonging to farmers. The elevator company carries its own insurance and it is said that very little of the wheat owned by farmers was insured. Owing to the fact that a heavy rain was falling at the time of the fire a bucket brigade was able to save nearby warehouses and other buildings. The fire is supposed to have originated from the office stove. Charles Torrance, manager of the warehouse, left a fire in the stove when he went to supper at about 6 o'clock p. m. The fire was discovered about two hours later and at that time the whole interior of the building was a mass of flames. The burned structure will be rebuilt, as Diamond is one of the most important shipping points on the O. R. & N. line.

The boiler in the engine room of the elevator at Alexandria, Mo., owned by the Iowa and Missouri Elevator Co. of Keokuk, Iowa, exploded shortly after noon on January 30, killing John Boyd, a farmer. The engine was in charge of John Goodspeed, who had just left the engine room after having replenished the fire and tested the water and steam. The cause of the explosion is not known. Mr. Boyd had been hauling cobs from the elevator and was in the act of backing his wagon under the cob chute when the explosion occurred. Neither his team nor wagon were injured, nor were John Fox and his three sons who were loading corn into a car near where the explosion occurred and had three teams, none of which was struck. The force of the explosion badly damaged the elevator building and the machinery. The damage to the plant, which is estimated at several thousand dollars, will be repaired at once. The man who lost his life was about 45 years old and leaves a widow, one son and three daughters.

Fire of unknown origin destroyed the Callahan Sons Co.'s warehouse at Thirteenth and Lexington streets, Louisville, Ky., on January 26 and damaged the company's elevator adjoining. The fire broke out shortly before 6 o'clock p. m., starting in the central part of the warehouse, where a large quantity of baled hay was stored. Spontaneous combustion is assigned as a possible cause of the conflagration. There had been no fire in the part of the building where the blaze originated and no smoking was permitted in the plant. M. C. Harris, foreman of the warehouse, discovered the fire and gave the alarm. The inflammable nature of the contents of the warehouse caused the fire to spread rapidly and the employees of the office had barely time to put the books and papers into the safe before they were driven out by the flames. The fire department succeeded in saving the company's elevator and other near-by structures. Although the elevator is metal clad it was

located only about twenty feet from the warehouse and it required the efforts of three engine companies to prevent its destruction. The elevator was considerably damaged on the side facing the warehouse and a cottage owned by the Callahan Sons Co. was partially destroyed. The burned warehouse was a three-story frame structure, covered with corrugated iron. It contained 100 carloads of baled hay, 5,000 barrels of flour, 10,000 bushels of oats and a large quantity of corn and other grain. The Callahan Sons Co.'s loss is estimated at \$100,000. There was \$17,000 insurance on the warehouse; \$37,500 on stock; \$2,000 on machinery and \$1,000 on office furniture. The damage to the elevator is fully covered, as there is \$27,000 insurance on that structure. The warehouse will be rebuilt as soon as possible on a much larger scale. The Callahan Sons Co. is a corporation formed about ten years ago to take over the hay, grain, flour and feed business established in the early '40's by James Callahan Sr. The company has a capital stock of \$100,000 and the officers are: President, James Callahan Sr.; vice-president, J. E. Callahan; secretary and treasurer, R. L. Callahan; superintendent, W. C. Callahan.

SEEDS

The Leifer Bros. Co. has been chartered at Little Rock, Ark., to deal in seeds, implements and dairy supplies. The capital stock is \$15,000 and the incorporators are: John, George and Charles L. Leifer.

At the recent meeting of the executive committee of the American Seed Trade Association, held in Cincinnati, Ohio, the Thousand Islands was selected as the place for the next annual convention, which will be held on the second Tuesday in June and will last five days.

The new plant of the Levings Bros. Seed Co. at Paris, Ill., was totally destroyed by fire of unknown origin on January 24. A large quantity of seeds were burned. The loss is \$6,000, with \$2,500 insurance. The burned building was of frame construction, 40x34 feet in size.

F. E. Winans, Chicago, reports February 1: Offerings of cash seed rather scarce. The demand shows improvement and there is a tone of firmness in the market notwithstanding trade is quiet. With some improvement in weather conditions an increase in the Eastern demand may be expected. The speculative market is rather inactive; \$2.87½ is bid for both March and April and both futures are offered in a limited way at \$2.90.

The Cleveland Seed Co. is planning to move its plant from Cape Vincent, N. Y., to Avon, Livingston County, that state. The company's office headquarters are at Rochester, N. Y., but its principal warehouses are at Cape Vincent. The business men's association at Avon is trying to secure the company's location in that town. The company already has about twenty acres of land near Avon, and if the change is made will expend about \$20,000 in improvements.

There is said to be a scarcity of seed beans for this year's planting. A seed man states that the three recent warehouse fires in California and Michigan are in a measure responsible for the shortage, as a large quantity of beans were destroyed. Last year's crop was none too large even if none of it had been destroyed. Seed peas are also scarce, owing to the great quantities which are used by the canning factories. No shortage is expected in other lines of seeds.

John Bodger & Sons have removed their seed industry from the Arroyo Grande Valley in San Luis Obispo County, Cal., to the vicinity of Redondo, Los Angeles County, that state. The firm has purchased a ranch of 353 acres near Redondo and leased another tract of 150 acres. In addition to tilling the 500 acres they have contracted with farmers for raising seeds as well. The firm of John Bodger & Sons is composed of the father and two sons, Walter and John C. Bodger. For a number of years they had been extensively engaged in the production of vegetable and flower seeds.

A bill, introduced by the Hon. Mr. Fisher, minister of agriculture, is before the Dominion Parliament at Ottawa, Ont., to regulate the sale of seeds. The bill would prohibit the exposure for sale of seeds of cereals, grasses, clovers or forage plants containing the seeds of specified noxious and pernicious weeds unless the package containing such seed bears a label specifying the name of the seller with the kind of seed it is supposed to contain, together with the common names of the noxious weeds, the seeds of which are present in the package. Another provision of the bill creates a standard for the seed of timothy, red clover and alsike, or mixtures of these seeds.

PERSONAL

George W. Miller is now in charge of the B. P. Hill Grain Co.'s elevator at Lena, Ill.

W. J. Teng succeeds Mr. Stevenson as agent for the Neola Elevator Co. at Harmon, Ill.

John Olson has been appointed grain buyer for the Cargill Elevator Co. at Cokato, Minn.

William H. Judy, a grain dealer of Coatsburg, Ill., was stricken with paralysis recently.

R. T. Hannah has resigned as buyer for the Northern Grain Co. at Wood Lake, Minn.

Bruce Goodrich has accepted a position with the Burgess Elevator Co. at Hampden, N. D.

Edwin A. Bowles has taken the position of grain buyer at Bushnell, S. D., for Howard & Bemis.

Arthur Coon of Bushnell, S. D., has taken charge of Howard & Bemis' elevator at White, S. D.

W. L. Almquist of Ellendale, N. D., is now agent for the Duluth Elevator Co. at Hancock, Minn.

H. S. Joy, formerly of Gary, S. D., has taken a position with the Atlas Elevator Co. at Doland, S. D.

C. A. Romstad of Union, N. D., has taken charge of the Imperial Elevator Co.'s elevator at Towner, N. D.

H. S. Wiswell of Colgate, N. D., is now grain buyer for the Imperial Elevator Co. at Donaldson, Minn.

John Stump has been appointed grain inspector for Vigo County, Ind., in which Terre Haute is located.

Amos E. Yehr has succeeded H. O. Silvers as manager of the Berne Grain and Hay Co.'s elevator at La Grange, Ind.

Joseph Fritz has succeeded J. W. Burt as manager of C. H. Chase's grain and lumber business at South Shore, S. D.

G. W. Groehler of Clarkfield, Minn., has succeeded Ed. Pehrson as buyer for the Pacific Elevator Co. at Fairfax, Minn.

C. H. Flowers has resigned as wheat buyer for the Powers Elevator Co. at Rice, Minn., and is succeeded by Samuel Eaton.

E. Anderson, agent for the Dakota Elevator Co. at Walhalla, N. D., recently married Miss Alice Peterson of Battle Creek, Minn.

William Dobratz has accepted the position of buyer for the State Elevator Co. at Lester Prairie, Minn., and has taken charge of the house.

Victor Lund has been appointed manager of the Great Western Elevator Co.'s house at Lafayette, Minn., succeeding Roy Peterson, resigned.

F. H. White, proprietor of the elevator at Fairland, Ill., fell recently, as he was leaving his office to go home, breaking both bones in his right leg.

John Larson has resigned as agent for the Eagle Roller Mill Co. at its elevator in Cobden, Minn., and is succeeded by William Marti of Sleepy Eye, Minn.

C. E. Bird, of Honstain, Bird & Co., Minneapolis, Minn., left that city the first of February for a two months' pleasure and business trip through the South.

Fred Ripke, who has been in charge of the Peavey Elevator at Salem, S. D., for the past two or three years, has resigned and is succeeded by D. N. Potter.

Alexander Hillmann of Pana, Ill., has been appointed manager of M. R. Corbett's elevator at Millersville, Ill. Mr. Hillmann formerly had charge of an elevator at Dunkel, Ill.

Charles Hurd, who recently tendered his resignation as manager of the De Laney Elevator at Ray, N. D., has reconsidered the matter and again taken charge of the house.

Peter Fox has taken charge of the State Elevator Co.'s house at Walhalla, N. D., as manager and buyer. The elevator, which has been closed, is again open for business.

Harley Butler, who has been holding the position of second man in Tanton & Todd's elevator at Starkweather, N. D., has been appointed agent for that firm at Hampden, N. D.

Robert I. Hunt and W. H. Suffern, of the grain and milling firm of Suffern, Hunt & Co., Decatur, Ill., have purchased the stock in the Citizens' National Bank of that city formerly held by the Shlaudemans. These 150 shares, together with those already held by the Suffern-Hunt interests, practically give them control of the institution. At the annual stockholders' meeting Mr. Hunt was elected president to succeed Harry

Shlaudemans and Mr. Suffern was elected a director.

Robert C. House, with the Kemper Grain Co. of Kansas City, Mo., recently married Miss Elma F. Crow of that city.

David Potter has given up his position in the Peavey Elevator at Kasota, Minn., to take a situation at Salem, S. D. A Mr. Maxwell of Minneapolis succeeds him at Kasota.

William E. Savage, general manager of the Imperial Grain and Milling Co. of Toledo, Ohio, fractured his right arm at the elbow, on January 11, as the result of a fall on an icy sidewalk.

Martin H. Troup, for some time manager of the Atlas Grain Co.'s business at Collins, Iowa, has accepted a position with the same company at Jefferson, Iowa. Edgar Crosby succeeds him at Collins.

Rolline T. Crichtlow, an employee of the Williams & Fitz-Hugh Co. at Memphis, Tenn., has been transferred to Mobile, Ala., where the company recently leased the Mobile & Ohio Railway Co.'s terminal elevator.

Robert J. Hunter has resigned as agent for the Acme Elevator Co. at Granville, N. D., and is succeeded by W. L. Horner. Mr. Horner was formerly in charge of an elevator at Riga, N. D., for the same company.

John W. Hedges, who has been in charge of Field & Slaughter's elevators at Akron and Elk Point, S. D., for several years, has been transferred to Dell Rapids, S. D. Peter Simonson succeeds him at Elk Point.

J. A. Shortell has given up his position with the Osborne & McMillan Elevator Co. at Cogswell, N. D., and removed to Canada, where he will engage in farming. J. W. Prentice succeeds him as manager of the elevator at Cogswell.

H. H. Heater, who for about a year has been in charge of the Neola Elevator Co.'s elevator at Green Oak, Ill., has been appointed by the United States government as clerk on the engineering staff of the Isthmian Canal Commission.

J. C. Fears, manager of the Central Elevator and Warehouse Company of New Orleans, La., for the past nine years, has been appointed a member of the Board of Police Commissioners of New Orleans by Mayor Martin Behrman of that city. Mr. Fears is a native of Atlanta, Ga., but was for a number of years a resident of St. Louis, Mo., being manager of the affairs of the United Elevator Co. of that city. He filled that position until about nine years ago, when he was offered his present position with the Illinois Central Railroad Co. Since that time Mr. Fears has resided in New Orleans.

DURUM WHEAT.

[From Bulletin No. 70, Bureau of Plant Industry, Department of Agriculture, by Mark A. Carleton and Joseph S. Chamberlain, Washington, D. C., October 7, 1904.]

The cultivation in this country of durum wheat in response to an actual demand for it has passed the third season, and the fourth crop will soon be ready for delivery. Previous to 1901 this wheat could not usually be sold at the elevators or mills at any price and was rarely grown, in small quantities only, for stock feed. Since its commercial value has been demonstrated the production has increased from 100,000 bushels, the largest estimate in 1901, to at least 6,000,000 bushels in 1903—an increase of sixtyfold in two years. On March 18, 1904, the price of durum wheat at Buffalo, N. Y., was \$1.03 per bushel, though there was practically none to be obtained. Since May 20, 1904, \$1 per bushel has been offered at Buffalo for No. 2 durum wheat, to arrive on the opening of lake navigation.* A very good export business was accomplished with the 1903 crop, although the quality of the grain for export in that year was the worst it has ever been, or is likely to be, because of the unusually wet season. In the entire history of the country no other new crop appears to have made so remarkable a record.

It is a striking fact that 6,000,000 bushels of a grain formerly rejected should be sold at a fancy price toward the close of the winter, long before the new season opens. Most important of all, much the larger portion was sold to the mills for making bread flour. The significance of these facts is evident. The continued success of recent milling and baking operations has clearly demonstrated that durum wheat has not heretofore been given its proper rank. It should properly be considered as a wheat of the highest class, ranking with hard spring and hard winter, but should be graded on its own merits and kept absolutely distinct from either of these.

In portions of Europe where this wheat is well known its excellent qualities have been properly recognized for a long time, as mentioned in former

publications. In France, the greatest bread-eating country of the world, a large quantity of durum wheat is used for bread, and in the region from Greece to Roumania, inclusive, it forms a large percentage of the annual crop consumed. Much the largest production of durum wheat is in East and South Russia, and the price at the principal Russian markets is always higher than that of the hard red spring and winter wheats, although the latter easily equal in quality the similar wheats of this country. In the Volga River region the variety Kubanka or Beloturka, a durum wheat, is the most popular of all and always commands a price considerably higher than that of the hard red wheats, this price being the same either for local consumption or for export. The best bread of that region contains at least 80 per cent of Kubanka wheat flour, the remainder being usually hard red spring wheat flour.

So long as durum wheat is grown where it is well adapted, it will always possess certain special qualities of commercial value not existing to so great a degree in other wheats: (1) In the strictly semi-arid districts it usually ripens earlier than other spring wheats. This allows the wheat a greater chance to escape insect and fungus pests and thus insures a plumper, finer kernel. (2) Freedom from rust and smut is still further insured by the natural resistance of this wheat to the attacks of such fungi. The importance of smut resistance in the fields of the Northwest is manifest to those who are aware of the great damage to wheat from this cause in that region. (3) Hard spring and winter wheats are known to produce a harder, better grain in the drier districts and in dry seasons. Durum wheat, being particularly adapted to such conditions, always furnishes an excellent hard grain without a corresponding decrease in yield. (4) Accompanying this drought resistance and hardness of grain is a corresponding increase in the quantity and quality of the gluten. (5) The sugar content of durum wheat is considerably greater than that of other wheats. Even a small percentage of difference in this respect is of great importance to the baker during a year's operations. (6) The extreme dryness of the durum wheat grain in a good season gives the flour a great power of absorption, which, other conditions being equal, allows the baker to obtain more loaves from the same weight of flour, and in some cases would thus give this wheat a great advantage over other wheat flours of less absorption.

[Having dwelt upon the value of durum wheat for the manufacture of macaroni, and described the manufacture of that edible paste and its dietetic uses, followed by a similar treatment of the cereal for the manufacture of bread flour, and suggested its use for the manufacture of breakfast foods, the Bulletin continues in part as follows:]

In the nature of things it is, of course, impossible to obtain statistics of the annual production of a new crop. Up to date, therefore, any reported production of durum wheat has necessarily been simply an estimate. In the experiments of the writers, however, such close watch of the acreage has been kept from year to year that when it finally becomes possible to obtain statistics it will probably be found that the following estimates have been fairly close to the actual production. The first crop of any considerable amount was in 1901, of which the yield was probably not over 100,000, but close to 60,000 or 70,000 bushels. In 1902 a conservative estimate would place the production at about 1,500,000, although quite likely it reached 2,000,000 bushels. Our estimate of the crop of 1903 was at first 10,000,000 or 12,000,000 bushels. It seems more likely now that it was not much over 6,000,000, but may have reached 7,000,000 bushels. At present it is still more difficult to predict the amount that will be harvested the present season (1904). It can only be said now that it promises to be about 15,000,000 bushels, with the possibility of reaching 20,000,000 bushels. A crop of 20,000,000 bushels would be an increase of at least two hundredfold over the crop of 1901—that is, in four years—and at the same time would constitute one twenty-fifth of the entire wheat crop of the country on the basis of an average annual production of 500,000,000 bushels.

Through considerable correspondence and personal investigation the writers are able to state approximately the disposition of the last year's crop, though, of course, no one could expect accuracy in the matter. On the basis of a crop of 6,000,000 bushels, it appears that the disposition up to March 1, 1904, was about as follows: On the authority of Mr. J. N. Barnard, chief deputy inspector for Minneapolis, there were inspected when going into that city from September 1, 1903, up to and including February 29, 1904, 832 cars, which, at an average of 1,000 bushels per car, would make 832,000 bushels. During the same period there were inspected 317 outgoing cars, or 317,000 bushels. It may be added that, for the crop year of 1902-3, ending August 31, 1903, there were inspected when going into Minneapolis 187 cars, or 187,000 bushels.

It is reported by a well-informed broker on the New York Produce Exchange that up to March 4,

*It should be noted that this particular demand for durum wheat is chiefly for making bread flour at the mills.

1904, and since August of the preceding year, there were exported from New York something over 340,000 bushels. At the same time it is known that from 50,000 to 100,000 bushels were sold for different purposes in Boston and other portions of New England; but these figures only apply as far as the month of March, 1904. Therefore, the entire amount of the wheat of the 1903 crop sold in Minneapolis and the lake cities, exported to foreign countries, and used for various purposes in the eastern states would probably come close to 1,500,000 bushels. Allowing another million bushels for seed, for feeding to stock, for breakfast foods, and other miscellaneous purposes, there remain probably at least three and one-half million bushels that have been ground at the local mills for bread flour and for the production of macaroni, much the larger part of which was used for bread.

A prediction of the probable crop of 1904 has been made. Fifteen or twenty million bushels of a wheat which does not encroach upon the regular production of other kinds is a large quantity to be added to the general production of this country; but it should be noted that this leaves out of consideration entirely the enormous areas of the semi-arid and even arid districts admirably adapted to this grain which have not yet been touched by agriculture. The possibilities in reach of the farmers and commercial men in the production and trade in this new grain are not suspected at present by the people in general. Even under irrigation the wheat succeeds very well, but over by far the larger portions of the dry districts irrigation will be unnecessary, which can only be said, however, of a very few drought-resistant crops. All the while new districts of production are being developed and new trade centers established, as well as new trade routes. This wheat will be sold during the coming year at Kansas City, Omaha and Galveston, as well as at Minneapolis and Duluth, and there will be a very large increase over last year in the production of durum wheat in the districts tributary to these points, the production last year, in fact, being insignificant.

Aside from the export outlet for durum wheat, either in the form of the wheat itself or as semolina in France and Italy for the production of macaroni, there are, without question, still other outlets at present not at all considered by grain dealers or millers. In a number of foreign countries where bread of a rich flavor is desired without regard to color durum wheat flour will be very popular. This, no doubt, will be particularly true in those districts of the far East where there has been unusually rapid development in recent years. The increase in wheat production in Manchuria and the very large increase in flour production in the same country, instead of injuring our flour trade in the Orient, may, by educating the native population to the use of wheat bread, so increase the demand for such a product as to really benefit the trade of this country. Present conditions seem to indicate that this is quite likely to be the correct view. Should the Chinese and Japanese and other oriental peoples become fully acquainted with the use of wheat bread, the export outlet for American flour, and particularly for flour made from this class of wheat, would be, at least for a time, practically unlimited. It would seem, therefore, to be greatly to the interest of the millers and grain dealers to give special attention to the encouragement of the production of durum wheat in all of our undeveloped semi-arid areas. It is evident now that its increase in production is of just as great importance to millers and shippers as it is to the farmer.

THE CREDIT MAN.

The credit man is not so important a personage in the economy of the grain trade as in other lines of merchandising, seeing that grain is cash. Nevertheless, the receiving houses, more especially, must needs adopt certain methods in handling their business from consignors that approach the credit system, in form at least. Wherefor the book just issued, entitled "The Credit Man and His Work," will appeal to the financier's desk of all commission houses as well as to progressive bookkeepers and confidential men in both the city and country grain office. The author is E. St. Elmo Lewis, editor of The Book-Keeper and Fellow of the International Accountants' Society, and a fully competent expert and writer. It not only gives some new and striking suggestions, especially as to the basis of normal commercial credit, i. e., that it is based on the demand for marketable goods, but proceeding in the development of his theme it shows what influence "The Character of the Business," "The Character of the Management," the "System of Organization," "Competition," "Business Methods," "Accounting Methods," have upon the value of a credit risk, in compromising the value of marketable commodities. There are chapters on "The Balance Sheet," "Capital and Resources," "Credit Indemnity Insurance" (which is discussed by foremost experts for and against it),

"Cost of Production," as applied to determining valuations and profits; two chapters on systems for collections and credit information; "The Slow Pay Customer," four chapters on the legal side of the credit man's work, and chapters on a discussion of the value of information bureaus and agencies; "Some Characteristics of the Successful Credit Man," "Relation to the Selling Force" and "Conclusions," a total of twenty-five chapters. The book has 360 pages, is bound in cloth with leather back, and sold by the publishers, The Book-Keeper Publishing Co., Ltd., Detroit, Mich., at \$2 per copy, delivered.

HAY AND STRAW

Gilbert & Pender have succeeded C. W. Gilbert in the hay trade at Clayton, Mich.

Large shipments of hay are being made from Port Huron, Mich., to eastern points.

It is reported that a large amount of hay has been shipped from Sennett, N. Y., this winter.

The total receipts of hay on the Baltimore market for January were 4,136 tons, or 827 tons less than the same month in 1904.

A building permit was recently granted the Union Hay and Grain Co. of Cincinnati, Ohio, for the erection of a hay warehouse to cost \$10,000.

Fire in the hay and feed warehouse of Brings & Co., at St. Paul, Minn., on the night of February 5, caused a loss of \$700 before the blaze was extinguished.

J. D. Carscallen, John Moonan, Thomas Lenane, W. R. Tilson, F. W. Dusenberry and J. Y. Roberts constitute the Hay and Straw Committee of the New York Produce Exchange.

Sumner Crosby & Sons' hay and grain warehouse in South Boston, Mass., was burned on the evening of January 12. The loss is \$2,500. The burned warehouse was a two and one-half story frame structure.

The rules for the inspection of hay recently adopted by the inspection committee of the National Hay Association, subject to the approval of the next convention, have been adopted by the Kansas City Hay Dealers' Association.

It is stated that in Northwestern Iowa about 100 per cent more hay is being baled for shipment than at any time during the past fifteen years. This is said to be due to the fact that last year's crop was of fine quality and also to the fact that less cattle are being fed in that territory this winter.

The new hay shed of the Baltimore & Ohio Railway at its Mount Clare yards, Baltimore, Md., which was recently opened for business, is 80x337 feet in size and two stories high. It has a capacity of 200 carloads of hay and is equipped with three hay chutes and three electric elevators to facilitate handling.

The hay, feed and seed business of W. F. Lacy at Noblesville, Ind., and the fuel and brick business of the Noblesville Fuel and Supply Co., have been consolidated and incorporated under the name of the Lacy Seed and Fuel Co. The officers of the new corporation are: President, W. F. Lacy; secretary, W. W. Phelps, and treasurer, F. L. Kinnman.

A Pierre, S. D., dispatch of recent date says: "The success with alfalfa experiments west of the Missouri the past year means that a large amount of that crop will be sown in the valleys this year. When it brings from four to five times the same weight of feed per acre as can be secured from the natural hay, it is a product which is very attractive as a fodder crop, bringing the necessary amount of feed into easier reach, and where it can be secured with less time and expense to the rancher."

H. H. Freeman & Co., Chicago, report February 11: "Arrivals continue very moderate, for the severely cold weather prevents railroads from hauling the small receipts of hay they have, and prevents shippers from baling and routing their goods to this market in their usual quantity. Tracks here show limited offerings and demand rules firm, with prices fully maintained. We have had a very long period of firm, good markets and it looks as though February prices would remain high, for dealers and consumers have been unable to stock up at any time for the past six weeks, the small receipts preventing them from doing so.

Prices ruling are extremely favorable; do not neglect this market, for if you get your hay shipped now it will net you \$1 a ton more than the March and April markets will afford. The proportion of the crop yet to be shipped is large. The scarcity of

cars has held much hay back and when weather conditions moderate there will be a freer movement from all sections."

According to the official government crop report for 1904 the hay yield of the United States in that year was 60,696,028 tons, or 609,912 tons short of the crop of 1903; 838,452 tons larger than the yield of 1902; 9,652,028 tons larger than the crop of 1901, and 10,585,028 tons more than the output of 1900. The estimate of the crop of 1904 made by the government on November 1 was 61,903,000 tons, but the final returns cut the crop down to 60,696,028 tons, or 1,206,972 tons less than the November estimate.

HAY AND STRAW INSPECTION AT PHILADELPHIA.

James L. King, the newly-elected president of the Philadelphia Commercial Exchange, in his inaugural address, stated that the first important matter for the consideration of the directors was the advisability of establishing a hay and straw inspection department entirely separate from the hay and straw receiving trade.

Under the present system the inspection of hay and straw in that market is in the hands of five members, known as the Hay and Straw Committee. They are required to inspect all consignments of hay or straw against which complaint has been made. There is no compulsory inspection.

President King's idea is to place the inspection of hay and straw on the same basis as the grain inspection department, with a permanent inspector.

REVIEW OF THE CHICAGO HAY MARKET

The prices ruling for hay in the Chicago market during the past four weeks, according to the Daily Trade Bulletin, were as follows:

During the week ending January 21 quotations at the close ranged as follows: Choice Timothy, \$12.50@13.50; No. 1 Timothy, \$11.00@12.00; No. 2 Timothy, \$10.00@10.50; No. 3 Timothy, \$9.00@9.50; Choice Prairie, \$11.00@11.50; No. 1 Prairie, \$9.00@9.50; No. 2 Prairie, \$7.50@8.00; No. 3 Prairie, \$6.00@7.00; No. 4 Prairie, \$6.00@6.50. Inside price on Prairie Hay for state and outside for Kansas, Nebraska and Iowa Hay. Sales ranged at \$8.00@13.50 for fair to choice Timothy, \$6.00@9.50 for fair to choice state, and \$7.50@11.50 for Iowa and Kansas Prairie Hay. Bedding Hay sold at \$.75. Rye Straw sold at \$9.00@9.25. Wheat Straw at \$6.50, and Oat Straw at \$6.00@6.50. The receipts for the week were 4,731 tons, against 3,811 tons for the previous week. Shipments for the week were 162 tons, against 207 tons for the previous week. The arrivals of Prairie Hay were small during the week and a good demand existed. The market for Timothy Hay also ruled firm.

During the week ending January 28 quotations at the close ranged as follows: Choice Timothy, \$12.50@13.00; No. 1 Timothy, \$11.00@12.00; No. 2 Timothy, \$10.00@10.50; No. 3 Timothy, \$9.00@9.50; Choice Prairie, \$11.00@11.50; No. 1 Prairie, \$9.00@9.50; No. 2 Prairie, \$7.50@8.00; No. 3 Prairie, \$6.00@7.00; No. 4 Prairie, \$6.00@6.50. Inside price on Prairie Hay for state and outside for Kansas, Nebraska and Iowa Hay. Sales ranged at \$8.00@13.25 for fair to choice Timothy, \$6.75@8.50 for fair to choice State, and \$7.00@11.25 for Dakota, Iowa, Nebraska and Kansas Prairie Hay. Rye Straw sold at \$8.50@9.00. Oat Straw at \$6.00. The receipts for the week 5,568 tons, against 4,731 tons for the previous week. Shipments for the week were 273 tons, against 162 tons for the previous week. The market for both Timothy and Prairie Hay ruled quiet, the offerings were larger and the demand only quiet.

During the week ending February 4 quotations at the close ranged as follows: Choice Timothy, \$12.00@13.00; No. 1 Timothy, \$11.00@12.00; No. 2 Timothy, \$9.50@10.00; No. 3 Timothy, \$8.50@9.00; Choice Prairie, \$10.00@10.50; No. 1 Prairie, \$8.00@9.00; No. 2 Prairie, \$7.00@7.50; No. 3 Prairie, \$6.00@7.00; No. 4 Prairie, \$6.00@6.50. Inside price on Prairie Hay for State and outside for Kansas, Nebraska and Iowa Hay. Sales ranged at \$8.00@13.00 for fair to choice Timothy, \$6.00@7.50 for State, and \$6.00@10.50 for Wisconsin, Iowa, Nebraska and Kansas Prairie Hay. Rye Straw sold at \$8.50@9.00. Wheat Straw at \$5.50 and Oat Straw at \$6.00. The receipts for the week were 6,245 tons, against 5,568 tons for the previous week. Shipments for the week were 243 tons, against 273 tons for the previous week. A good demand existed for Timothy Hay, but Prairie Hay was very dull throughout the week.

During the week ending February 11 quotations at the close ranged as follows: Choice Timothy, \$12.00@13.00; No. 1 Timothy, \$11.00@12.00; No. 2 Timothy, \$9.50@10.00; No. 3 Timothy, \$8.50@9.00; Choice Prairie, \$10.00@1.50; No. 1 Prairie, \$8.00@9.00; No. 2 Prairie, \$7.00@7.50; No. 3 Prairie, \$6.00@7.00; No. 4 Prairie, \$6.00@6.50. Inside price on Prairie Hay for State and outside for Kansas, Nebraska and Iowa Hay. Sales ranged at \$8.50@13.00 for fair to choice Timothy, \$5.50@7.50 for

State, and \$6.75@10.00 for Wisconsin, Iowa, Nebraska and Kansas Prairie Hay. Rye Straw sold at \$8.50@9.25 and Oat Straw at \$6.00@6.50. The receipts for the week were 5,827 tons, against 6,245 tons for the previous week. Shipments for the week were 324 tons, against 243 tons for the previous week. The market for Timothy Hay ruled steady during the week. A fair demand existed and offerings were quite ample. The arrivals of Prairie Hay were large and the demand was light. A dull and dragging market was experienced and receivers found sales slow.

CROP REPORTS

In Nebraska the wheat is claimed to be well protected by snow.

Reports from all sections of California indicate that the grain and hay acreage will be large.

The territory tributary to Lawton, Okla., is in excellent shape for a good wheat crop. There has been an abundance of moisture.

General rains in Washington have improved crop prospects, although it is said there has not yet been sufficient moisture to hold the ground in prime condition.

There is considerable discussion in the Red River Valley over the question of seed wheat. It is feared that last year's wheat from the rust-infested districts will not germinate.

The outlook for wheat in Texas is encouraging, according to grain men and others who are posted on crop conditions. Fully three-fourths of the crop is considered safe. There is expected to be a large increase in oats acreage.

According to the Illinois crop bulletin the "opinion is freely expressed that probably considerable damage to wheat has ensued, because the plant entered winter mostly in a weakly state, due to adverse fall conditions, and had not attained sufficient vigor to withstand rigors of severe weather."

C. A. King & Co. of Toledo say: "Kentucky will not issue report until March. Present condition will not exceed 80 per cent, says our authority. Excessive drouth last fall and the extreme weather of January hurt. Area sown was 85 per cent of an average. Year ago the March condition was 54, but up to 67 in June on the area remaining. Government report made the condition there 67 last December."

In Pit and Post B. W. Snow summarizes the situation in growing wheat thus: "Generally speaking, a reasonable review of the conditions of plant growth and weather experiences would lead to the conclusion that some winter damage is inevitable, certainly more than usual, and with equal certainty, so far, less than last year, when by the official estimate between 4,000,000 and 5,000,000 acres were lost from winter killing."

The following table shows the quantity of snow on the ground on February 6, the figures being the official ones of the weather bureau:

Inches.	Inches.
North half Texas.....3 to 4	Ohio.....1 to 5
North half Louisiana and	Illinois.....4 to 11
Mississippi.....Trace	Nebraska.....5 to 10
Arkansas.....2 to 3	South Dakota.....2 to 4
Oklahoma.....3 to 3	North Dakota.....2 to 6
Kansas.....2 to 7	Minnesota.....4 to 7
Missouri.....4 to 7	Wisconsin.....7 to 18
Tennessee.....1 to 5	Lower Michigan.....7 to 18
Kentucky.....1 to 4	Upper Michigan.....25
Indiana.....2 to 8	

Edward G. Heeman, Chicago, says, under date of February 8: "No one is able as yet to tell anything about the new crop, but records will show that the biggest and best crops of winter wheat ever grown were seeded in the dust. It means the plant roots deeply and is able to withstand the usual vicissitudes better than when seeded in the wet. In the latter case the plant stools too near the surface. Furthermore, dry falls are invariably followed by plenty of snow, like this winter, and an abundance of moisture in the spring, and it will probably turn out as usual, that those who buy too early, or in February, on expected crop damage in March or April, will have to sell out at a loss."

The weather bureau's summary of crop conditions on February 1 is as follows:

"East of the Rocky Mountains the month was colder than the average with light precipitation in most districts. In the Rocky Mountain region and to the westward the temperature was milder than usual with more than the average precipitation in the southern plateau region and Southern California and much less than the average precipitation as a whole. Throughout the Southern States the month was unfavorable for the agricultural interests in that section. The reports indicate that winter wheat was generally well protected westward of the Mississippi River and also in portions of the

Ohio Valley and Middle Atlantic States, but over much of the last-named district there was insufficient snow protection during the severest weather and in portions of Illinois and Indiana it is feared that the crop has suffered injury, large areas being covered with ice.

"On the north Pacific Coast, the outlook is favorable, except for late sown in Washington. In California the prospect is excellent, except along the Sacramento River, where some damage has been caused by heavy rains."

Michigan's report for February is summarized by C. A. King & Co. of Toledo, as follows: "Michigan February report shows favorably. Five hundred and thirty-three of their correspondents say there was no material damage to wheat last month. Ninety say there was some damage caused by ice. Some claimed the ice had been a protection, especially on some of the prairie land where snow blows off the fields badly. Year ago 95 per cent said no damage occurred in January. Area sown there 86 per cent of an average, and condition last December was 93. They have had bad luck raising wheat. Their crop this season is only 6,800,000 bushels. Year ago it was 15,500,000 bushels. They had 34,000,000 in 1898."

LLOYD'S: WHAT IT MEANS.

The Commercial Intelligence of London, England, in a recent issue contained an interesting interview with Sir Henry Hozier, secretary of Lloyd's, in which he details the history of the establishment.

Like most great and enduring enterprises, Lloyd's had a small beginning. It is now to the world of shipping and marine insurance what the house of Rothschild is to the banking world.

Lloyd's dates from the latter part of the reign of Queen Elizabeth, and had its origin in a small coffee house in Tower Street, kept by Edward Lloyd. He was an enterprising man, and through his business contact with seafaring men and merchants enlisted in foreign trade, foresaw the importance of improving shipping and the method of marine insurance. He was the founder of the system of maritime and commercial intelligence which has been developed into its present effectiveness. Before the time of Edward Lloyd maritime insurance in England was conducted by the Lombards, some Italians, who founded Lombard Street, but after Lloyd embarked in the business Britons conducted marine insurance in London.

The subjects of marine insurance are the ship, the cargo and the freight, all of which may be long to different parties. In time of war there is what is termed the maritime risk—danger from accident, collision and stranding—which is distinctly separate from the risk of capture and seizure by an enemy. This class of marine insurance had its inception in the conditions arising during the seven-year French-English war of 1757 to 1763.

Lloyd's moved to Pope's Head Alley in 1770, and in 1774 removed to the present quarters in the Royal Exchange. In 1871 Lloyd's was incorporated by act of Parliament. This act defined the objects of the society to be: (1) The carrying on of the business of marine insurance by members of the society; (2) the protection of the interests of members of the society in respect of shipping, cargoes and freights; (3) the collection, publication and diffusion of intelligence and information with respect to shipping.

The corporation of Lloyd's and the committee of Lloyd's, who are the executive body of the corporation, and the secretary of Lloyd's have practically nothing to do with the marine insurance in the way of taking risks or paying losses. Their duty in this respect is to afford marine insurance brokers who wish to effect insurances a place of meeting with those who undertake the risks.

In the interview referred to Sir Henry Hozier expressed his views on contraband of war and the question of an international treaty affecting the same, as follows:

"In my opinion we ought, as a maritime power, to be very cautious in entering into any treaty or agreement on that subject. My opinion of treaties is that they hold good just so long as it suits the stronger power, and in case of a great naval war we ought to be as unfettered as possible. The whole question can scarcely be satisfactorily solved by a conference, and will continue to arise whenever a naval power is at war. Moreover, that power will always put its own interpretation on what constitutes contraband of war."

Hauling grain eleven miles by traction engine was one of the new features in the agricultural life of Longmont, Colo., during last fall. Five hundred and ten sacks of barley, weighing 40,750 pounds, were hauled into Longmont, on one trip. This new method of transportation bids fair to become popular in the agricultural district of the Centennial state.

FOREIGN NEWS

The new elevator buildings at the Liverpool Grain Storage Co. at the Coburg Dock, Liverpool, are about completed and ready for business.

It is estimated that Great Britain imports no less than 3,000,000 hundredweights of India dirt in India wheat, of which a large part is soil. The percentage of dirt increases very rapidly after August, when shipments begin. In an endeavor to get the amount of dirt reduced the National Association of British and Irish Millers, at a meeting held in London to discuss the steps necessary to take to get rid of dust, learned that the government factory inspectors are "going to take active steps to do away with the question of dust in barges, ships, elevators and silos," and after much discussion a committee was appointed to deal with the problem and instructed "to approach the India office with a view to getting the excessive amount of dust and dirt now being shipped from India in wheat materially decreased."

In Leith Exchange, the other day, Mr. Richard Waugh, Canada, showed to a number of local corn merchants several samples of the standard grades of wheat as inspected by the government grain inspector at Winnipeg, and also samples of the lower or "commercial" grades. He invited the merchants present to inspect the samples, and he afterward pointed out to them what he considered the practical value of the Canadian system of grading wheat. That system he considered the most satisfactory of all methods yet tried to secure equitable sales between the producer in America and the purchaser in this country. Mr. Herdman said there had unfortunately been instances of wheat being sent across from Canada under a certificate that it was a certain grade, but turned out to be an inferior grade. In such cases the certificate was held to be final, and what was wanted was some system of appeal against the certificate if the wheat was not of the grade certified. Mr. Waugh: Did that wheat come direct? Mr. Herdman: Certainly. Mr. Waugh said that if Leith merchants could find any case of that kind those in the West would only be too delighted to inquire into it. It would, he thought, be found that the certificate complained of had been made out at Montreal.—The Miller.

The duties on grain as fixed by the German imperial government's new foreign treaties are equivalent to an increase of 43 per cent on rye, 57 per cent on wheat, 76 per cent on oats and 100 per cent on barley. The treaties go into effect February 12, 1906. The duty on corn is raised from 37 cents per metric hundredweight (220.46 pounds) to 81.4 cents. Von Buelow, the chancellor, said it was necessary to protect agriculture, and as the empire "needs little corn, the increase of duty will enlarge the demand for barley." Germany, the chancellor said, is "essentially an agricultural and industrial state. Wide territories in Germany, especially in the Northeast, South, Southwest and in Bavaria, rely on agriculture. The flourishing development of industry has limited and checked agriculture. These treaties are designed to equalize the development and to assist agriculture. For this purpose, the chancellor said, higher duties on grain and animal industries are necessary. He admitted that the scale of minimum duties for the four principal kinds of grain was put into the tariff law at his wish in order to show foreign states, when negotiating new treaties, that Germany cannot accept lower grain duties than these. He also admitted that negotiations, especially with Russia and Austro-Hungary, are exceedingly difficult, since those countries have been injured by Germany's agrarian duties, and object to the treaties in the interests of their farmers.

The methods and the honesty of Russian grain exporters is well illustrated by an article from an Odessa paper in which a police inspector [even such!] was obliged to confess to the "disgusting" sophistication which came under his eyes. "On November 19, at 4 p. m.," says this rara avis of the Russian police, "as I passed the warehouses referred to, I saw a frightful cloud of dust. I thought it was a collapse or a fire, but when I entered the warehouse I saw one man mixing a parcel of wheat, and on examination I found, on one hand, about 700 poods of wheat already mixed; on the other hand, a large mound, consisting of strata of good wheat and bad, quite black, and some fine, powdery stuff. On the floor, a finger thick, lay the dust of this expert operation. I made report, and later the owner tried to get the name of the informer and stop the case, but the matter is in the hands of the police and cannot be moved." But it is said that some of the principal shipping ports appear to be making efforts to improve the

standard of grain shipments. Quite recently the Nicolaieff Bourse announced that it would from the date of December 14 issue certificates on all grain shipped, showing the natural weight of the grain and the percentage of impurities contained therein. It, of course, remains to be seen whether the purchasing countries will generally accept these certificates as a basis for business. At Novorossisk a new bourse has lately been formed, which has determined to make up monthly standard samples of the wheat, barley and oats exported.

The African World says that "the possibilities of Lagos as a grain-growing colony do not yet seem to be generally recognized. Large quantities of corn are already raised by the natives, and there is a strip of country ten miles wide on each side of the 125 miles of railway which is easily accessible to transportation. One Lagos firm bought 300 tons of grain per week a few weeks after they had intimated that they were open to buy, and they hoped to ship at least 2,000 to 3,000 tons per month to Liverpool in the immediate future; but as they were buying on a very narrow margin the question of freight assumed paramount importance; yet the steamship company recently raised the freight from 15 shillings to 20 shillings per ton. The first shipments of wheat were of fairly good quality. It resembled fair Argentine.

IN THE COURTS

The municipality of Mapletown, Iowa, has begun suit against the Neola Elevator Co. to test the local city scales ordinance.

Prentiss Brooks & Co. of Holyoke, Mass., have placed an attachment amounting to \$10,000 on the grain business of G. H. Meserve, Easthampton, alleging breach of contract.

In the action at Covington, Ky., of Harry Todd against Henry Heile & Sons, to recover \$110 alleged depreciation in the value of a carload of hay, the jury found for the defendants, January 28.

Geo. C. Wood of Windfall, Ind., has sued the P., C., & St. L. Ry. Co., claiming \$10,000 damages. Mr. Wood operates three grain elevators, one each at Windfall, Nevada and Curtisville. He claims that inasmuch as the company has no competition at these points, it has discriminated against him in furnishing cars.

Elias Lehmann has begun suit in Milwaukee against Sheriff W. J. Cary, Mrs. W. J. Cary and Joseph T. Cooke to recover \$214.60, alleged advances made to them while conducting a stock and grain commission business under the firm name of the Cream City Commission Co., between February 10 and March 14, 1902. The complaint charges that the money was never invested for the plaintiff's benefit.

The Smith-Baker Commission Co., Duluth, on January 14, brought suit against H. B. Barneman of Hallock for \$1,124.58. Barneman, it is alleged, was engaged to buy wheat for plaintiffs, and it is claimed that from time to time the defendant demanded certain sums, fraudulently representing the purchase of grain aggregating \$4,471.35, and that he never had grain in his possession or control worth more than \$3,475.79. As a second cause of action the plaintiffs allege that Barneman represented that he had purchased on November 22 for plaintiffs a carload of wheat from one Gus Peterson of Hallock and, falsely representing its value at \$900, drew upon the plaintiff for that amount and the sum was paid on his representation. It is alleged that the car was not worth more than \$770.98.

In accordance with the decision in New Jersey holding the directors of the American Malting Co. personally liable for the sums paid out under their direction in dividends which had not been earned, suits have been begun at Milwaukee against Robert Nunnemacher to recover for the company the sum of \$1,855,350 so alleged to have been paid to holders of preferred stock. The bill of complaint filed in the United States court on January 12 says Mr. Nunnemacher was a director of the company from October 2, 1897, to November 8, 1899, and a holder of preferred stock during this time. In 1897, the company, having been organized in New Jersey, secured permission in due form to do business in New York, and since then four of eight directors' meetings have held in New York City, and this suit is brought under the laws of that state. Since 1897, and especially during the period recited in the suit as affecting Mr. Nunnemacher, the company's earnings and surplus have not been sufficient to declare a dividend of 1% per cent. But, it is added, the directors, Mr. Nunnemacher among them, did declare a dividend of 1% per cent per quarter. These dividends in total amounted to \$1,855,350, says the complaint, during the time in-

volved in the action. It is claimed that Mr. Nunnemacher was a director and was present at all meetings of the board, except one at which a dividend of \$219,450 was declared; but, it is added, although he was not present at this meeting, he nevertheless did not make any objection to the declarations of any dividend at any time while he held office. He is alleged to have received and still holds \$6,767.25 secured by the voting of these dividends. Similar suits are expected to be begun against all the directors of the company of that period in other states.

Suit was begun at St. Louis on January 14 by Jos. K. Davidson, asking that the assignment of Harroun Brothers to A. C. Stewart, Henry C. Haarstick and William T. Kemper be set aside; that a receiver be appointed to take charge of the firm's business, and that the Chicago, Burlington & Quincy Railway Co. be restrained from paying Harroun Brothers \$15,000, which it is alleged the railroad owes. Davidson alleges that he was the owner of a corn shelling plant at McAlester, I. T., and of scales, cribs and bins at Adair, Vinita, Blue Jacket and Welch, I. T.; that he entered into an agreement with Harroun Brothers October 8, 1903, that they should mutually conduct the business at those points. This agreement, Davidson says, was not to be terminated by either party without giving the other sixty days' notice; but he charges that on October 30, 1904, Harroun Brothers terminated the agreement without notice. At that time there was due him under the contract more than \$3,000. He asks an accounting and that the amount due him be ordered paid out of the money owed Harroun Brothers by the railroad company.

RADICALISM IN CANADA.

Grain growers' association demand upon the government to interfere with the business of marketing grain "grows with what it feeds upon." Each succeeding year the calls for amendment of the Grain Act are more and more radical in their nature. This winter's edition of the demands or recommendations comes from Portage la Prairie branch of the Grain Growers' Association, and includes the following:

1. We recommend that the railway companies should take over the elevator system of the country, own and operate it.

2. An applicant, ordering cars, should receive a car to suit his requirements, or his order should be allowed to remain on the order book until the same is filled.

3. The attention of the warehouse commissioner is drawn to the fact that the standing instructions of certain elevator companies to their local agents provide that a certain percentage, say from 50 to 75 bushels to the car, is ordered to be held out of each shipment made for a farmer, contrary to the provisions of the Grain Act, which provides that an elevator company receiving a farmer's wheat into its elevator, upon payment of storage charges, is compelled [required?] to load every bushel into the car or cars when ordered to do so, and, in the event of their refusal, they are liable to prosecution under the act.

4. That the use of portable elevators be permitted at platform or track loading.

5. That the executive committee of the central association interview the Canadian Pacific Railway Company and the Canadian Northern Railway Company, to secure through rates on cars transferred from one road to another, and, in the event of their failing to secure the same, that they bring the matter before the railway commission to deal with it at an early date.

6. That we strongly urge on the central association the appointing of a representative at Winnipeg, to look after the grading of all cars of grain belonging to members of the Grain Growers' Association only, and that a fee of 25 cents per car be charged for the same, and that he have full power to ask for reinspection and a survey, if instructed by the shipper to do so, and he deems it advisable.

7. That the central association protect Mr. John Ferris' interests in the case of Ferris vs. the Canadian Northern Railway Company for shortage on a car of wheat at Porth Arthur, as we consider that the interests of all grain growers are identical, and it is important that railway companies should be held liable for wheat loaded into cars.

9. We are of opinion that the chemical test used by certain milling companies is a more perfect one than the present system of grading, and we recommend that the central association make a thorough examination of the chemical system, and if the result prove satisfactory we recommend that it be adopted.

At Rosser the local association adopted a resolution suggesting that the mixing elevators in Winnipeg be abolished, as it was considered that the wheat mixed in these elevators, although it might come up to the required standard, would

"undoubtedly have the effect of reducing the high standard of the Manitoba wheat on the world's markets." It was also suggested that if the elevators were allowed to mix wheat the farmers should also be allowed to do so.

The general grain committee of the Winnipeg Board of Trade recently recommended that the minister of trade and commerce be respectfully urged to introduce legislation to amend the inspection of grain act by the addition of the following: "Should the contingency arise, from the lateness of harvest or other climatic conditions, that proper and representative samples of any quality of grain of the crop of that year cannot be secured for the purpose of inspection and action thereon, at any meeting of the Grain Standards' Board, the members of the Board present at such meeting may delegate authority to a committee, of such number as they may decide upon, to meet at a later date and select such further commercial grades or samples as may be demanded by the character of the samples afterward secured; and such commercial grades, so selected by the said committee, shall be deemed, for all purposes of inspection and grading, as if chosen by the full Board."

The minister said he would take it under consideration.

The Carberry growers have agreed to the following resolution: "Whereas, the present system obtaining in the marketing of grain permits the grain dealers to fix the spread in price of the different grades of milling wheat regardless of the relative value of grain for milling purposes, this meeting is of the opinion that the government should establish a laboratory at Winnipeg for testing the milling qualities of all wheat suitable for making flour. We would also recommend that the standard board fix the grades so that the difference in value of the several grades of milling wheat shall not exceed 3 cents per bushel."

BARLEY AND MALT

The Des Moines Malt Co. has been chartered at Des Moines, Iowa, with a capital stock of \$25,000. Jacob Kunz and others are the incorporators.

The Hastings Malting Co., of Hastings, Minn., is tearing down its old warehouses on the levee in that city and will erect a power house on the site to supply power for operating its entire plant.

It is announced that Leon S. Kahn, of Strauss, Kahn & Co., City of Mexico, has purchased the government concession recently granted to L. Domingo Barrios Gomez for the erection of a malting plant in Mexico City.

Samples of several varieties of imported barley, which have been successfully grown in Wisconsin as a test of their adaptability to the soil in this country, under the direction of D. G. Fairchild, agricultural explorer of the Department of Agriculture, bureau of plant industry, have been received by Minneapolis dealers. With the view of introducing better seed barley into the Northwestern states, for the improvement of the quality of the crop, the Wisconsin test barley will be introduced in Minnesota and the Dakotas this summer.

IMPORTS AND EXPORTS OF BARLEY AND MALT.

BARLEY.

Imports—	Bushels.	Value.
December, 1903	40,259	\$ 20,378
December, 1904	1,531	890
Twelve mo. end, Dec., 1903....	72,981	36,407
Twelve mo. end, Dec., 1904....	90,167	44,126

Exports—	Bushels.	Value.
December, 1903	1,598,215	931,973
December, 1904	1,279,124	678,836
Twelve mo. end, Dec., 1903....	9,799,564	5,678,148
Twelve mo. end, Dec., 1904....	8,415,409	4,560,931

BARLEY MALT.

Exports—	Bushels.	Value.
December, 1903	29,463	20,359
December, 1904	22,938	16,301
Twelve mo. end, Dec., 1903....	366,003	266,779
Twelve mo. end, Dec., 1904....	463,747	331,417

At the annual meeting of the Ohio Grain Dealers' Mutual Fire Insurance Association H. S. Grimes of Portsmouth was elected president; C. H. Tingley of Columbus, vice-president; Fred Vercoe, treasurer; J. W. McCord, secretary, and C. O. Peters, inspector. In the board of directors there was but one change, E. A. Grubbs of Greenville being succeeded by Grant McMorran of St. Paris. Reports showed that insurance in force amounted to \$700,200, a net gain for the year of \$131,000. There were but two losses during the year, amounting to \$1,407.

OBITUARY

S. A. Kemp, formerly secretary of the Duluth, Minn., Board of Trade, died at his home in that city on January 29 of paralysis.

Charles H. Goodsell, superintendent of the Minneapolis & Northern Elevator Co., died at his home in Fergus Falls, Minn., on January 12, aged 64 years. He was a veteran of the Civil War.

Thomas G. Walkington, one of the oldest and best-known members of the grain department of the San Francisco Merchants' Exchange, died at San Mateo, Cal., on January 16, after an illness of about two months. Mr. Walkington was the proprietor of the Mission Bay Warehouse. He is survived by his widow.

Consider Parish died at his home in Brooklyn, N. Y., on January 12, aged 75 years. The deceased was born in Worthington, Mass., and removed to New York when a young man. He engaged in the grain and flour business and was a member of the New York Produce Exchange. His wife and a daughter survive him.

G. A. Davis, for many years a resident of Mackinaw, Ill., died at his home in Minier, Ill., in January, of pneumonia. He was born in Mackinaw in 1853 and resided there until 1889, when he moved to Tazewell, Ill., where he was engaged in the grain business. Mr. Davis was a member of the Masonic fraternity and the Knights of Pythias. He leaves a wife and three children.

James E. Van Patten, a retired grain dealer of Sheldon, Iowa, and a director of the Sheldon National Bank, died of Bright's disease on January 12 at the German Hospital in Kansas City, Mo. He became seriously ill while passing through that city on his way to Colorado, where he was going for his health. His remains were taken to Evansville, Wis., for burial. He leaves a widow.

H. M. Chappell, who was for a number of years engaged in the grain business at Taylorville, Ill., in partnership with Jacob Maxwell, died on January 25 at his late home in Winfield, Kan., of blood poisoning. The deceased was 83 years of age and is survived by one son, J. A. Chappell of Winfield, Kan. His remains were taken to Millersville, Ill., for interment. The late Mr. Chappell formerly resided at Millersville and also at Assumption, Ill.

Ellis Pearce, formerly a member of the grain firm of Pearce & Larkin, died at his home in Pawtucket, R. I., on February 2, at the age of 70 years. He had been ill for about fourteen months preceding his death. Mr. Pearce was born in Pawtucket when it was a portion of Massachusetts. He was engaged in the grain business for many years, withdrawing from the above-named firm about 25 years ago. One daughter survives him.

Joseph McCoy, one of the oldest grain dealers in Iowa, died of pneumonia at his home in Stanwood, that state, in January. The deceased was about 70 years of age and had been a resident of Stanwood for many years. For the past three years he had been engaged in the grain business at Tipton, Iowa, operating the elevator on the C. & N-W. Railway at that place. Prior to that he was for many years in the grain trade at Stanwood. He leaves a wife and two children.

Evan Thomas, senior member of the firm of Evan Thomas & Co., dealers in grain, flour and corn products, was instantly killed by a fall from a window at his residence in New York City on January 28. Mr. Thomas is supposed to have opened the window for fresh air to relieve a sudden attack of vertigo and in some manner lost his balance and fell to the pavement four stories below. Death was instantaneous. The deceased was 65 years of age. He was president of the New York Produce Exchange from 1890 to 1894 and was prominent as a Democrat. He served as a presidential elector for President Cleveland, but always declined other public office.

Charles S. Easton, a well-known grain man and member of the Peoria Board of Trade, died at his home in Peoria, Ill., on February 6. The deceased was born at Lancaster, Pa., in 1839. His parents moved to Peoria when he was still an infant. His father, Samuel Easton, was one of the first grain dealers in that city. When he reached manhood he became a partner in his father's grain business. At the breaking out of the Civil War Mr. Easton joined the 8th Illinois Volunteers and served under Colonel Oglesby. When Mr. Easton was mustered out at the close of the war he again joined his father and brother in the grain business. He married a daughter of Judge Sparrow of Bloomington, Ill., and after withdrawing from the business at Peoria removed to Bloomington and engaged in the grain business alone. Later he returned to Peoria, and for many years managed the grain in-

spection department of the Peoria Board of Trade. He is survived by his widow, one son and two daughters. He also left a brother and two sisters.

George H. Martin died at his residence, 4340 Ellis Avenue, Chicago, on January 14. The deceased was one of the early members of the Chicago Board of Trade, his connection dating from 1865. He was born in Grand Rapids, Mich., in 1834. Mr. Martin served in the Federal army in the Civil War and was a member of the G. A. R. and the Loyal Legion. He was for many years a partner in the grain firm of George M. How & Co., but for about twenty years previous to his death had been engaged in the grain commission and brokerage business under his own name.

MICHIGAN MILLERS' MUTUAL FIRE INSURANCE COMPANY OF LANSING.

The twenty-fourth annual statement of the Michigan Millers' Mutual Fire Insurance Company of Lansing, by A. D. Baker, secretary, dated January 1, 1905, shows that although the year 1904 showed a greater total loss by fire than did any year since 1871, nevertheless this company had a very satisfactory year. The saving to its members reached 40 per cent of the basis rates, a reduction from 50 per cent, as saved in previous years, owing to an unprecedented number of flour mill fires, there having been losses on 69 risks in excess of \$1,000 each and 309 averaging about \$165 each. The financial statement may be condensed as follows:

ASSETS.	
First mortgage bonds.....	\$ 76,850.00
U. S. government bonds.....	4,410.00
Bonds of Michigan municipalities, market value.....	315,279.76
Home office building.....	6,000.00
Cash in bank.....	101,043.05
Interest due and accrued.....	8,468.35
Premiums due (net).....	18,614.83
Cash assets.....	\$ 530,665.99
Premium notes (net value)....	1,165,547.88
Total assets.....	\$1,696,213.87
LIABILITIES.	
Losses in process of adjustment.....	\$ 26,801.62
Reinsurance reserve.....	181,926.23
Guarantee deposits.....	31,022.01
Total liabilities.....	239,749.86
Net assets.....	\$1,456,464.01
Net cash assets.....	290,916.13

MILL OWNERS' MUTUAL FIRE INSURANCE COMPANY OF IOWA.

The thirtieth annual statement of the Mill Owners' Mutual Fire Insurance Company of Iowa, for the year 1904, as made to the annual meeting of the company at Des Moines, Iowa, in January, shows a total of insurance in force of \$5,683,100, and deposit notes on hand (one year's premiums) of \$225,145.66. Continuing, the report is as follows:

RECEIPTS.	
Assessments.....	\$108,616.07
Guaranty deposits.....	26,872.94
Interest, etc.....	7,847.98
Mortgage loans repaid.....	\$143,336.99
Cash in hands treas. Jan. 1, 1904	25,550.00
	31,562.40
	\$200,449.39
DISBURSEMENTS.	
Losses.....	\$82,686.44
Expenses.....	21,633.46
Guaranty dep. returned.....	10,629.57
Mortgage loans made.....	\$114,949.47
Cash in hands treas. Dec. 31, 1904	48,300.00
	37,199.92
	\$200,449.39
Losses adjusted and paid since Jan. 1, 1904..	\$82,686.44
Losses adjusted (not due).....	3,000.00
Loss resisted.....	4,500.00
ASSETS.	
Deposit notes subject to assessments.....	\$225,145.66
Real estate loans, first mortgage.....	\$146,372.10
Interest acc'd on loans (not due).....	3,382.88
Cash in hands treas. Dec. 31, 1904.....	37,199.92
	186,954.90
	\$412,100.56
LIABILITIES.	
Losses adjusted (not due).....	\$3,000.00
Loss resisted.....	4,500.00
	7,500.00
Surplus over all liabilities....	\$404,600.56

STATEMENT.

Showing the total receipts and disbursements since the organization of the company, April, 1875.

RECEIPTS.

From all sources.....\$1,562,486.19

DISBURSEMENTS.

Losses.....	\$1,056,503.55
Expenses.....	251,370.50
Guaranty dep. returned.....	70,965.12
Entrance fees returned.....	75.00
Real estate loans.....	146,372.10
In hands of treasurer Dec. 31, 1904.....	37,199.92

1,562,486.19

In comparing the assets of this company with the assets of companies doing business on the five-year plan, remember the deposit notes of this company represent the amount of but one annual premium.

J. G. SHARP, Secretary.

TRANSPORTATION

On January 18 the Chicago Great Western announced a rate of 10 cents on wheat from Chicago to Minneapolis, a reduction of 2½ cents.

The first sign of winter business since the close of navigation was on January 19, when offers of 2 to 2¼ cents per bushel at Chicago for winter storage and freight to Buffalo were freely made. Vessel men were asking 2½ cents.

The Oregon Railroad & Navigation Company has announced that on February 15 the rate on wheat from all interior points to Fort Worth, Galveston and Houston will be raised from 66 cents to 75 cents per 100 pounds. The long haul cannot be afforded, it is asserted, unless larger tonnages are shipped than have been going over the road.

New rates on grain and grain products from Buffalo and the Niagara frontier were effective February 2, as follows: New York, 10 cents; Philadelphia, 9½ cents; Boston, 12 cents. A rate of 8½ cents per hundred on flour, bran or middlings to New York, Philadelphia, Baltimore and Boston for export was also effective on the same date.

It is stated that the Minneapolis & St. Louis Railroad has made an arrangement with the Burlington for trackage rights between Des Moines and Oskaloosa, Iowa, which will allow this road to handle Iowa grain through Des Moines to Peoria, Ill., using the Iowa Central from Oskaloosa on. Incidentally this confirms the statement that the Iowa Central would eventually reach Des Moines.

The transportation committee of the St. Louis Merchants' Exchange on February 1 reported that the Burlington had made a concession favoring St. Louis in the following order concerning grain: "All grain originating on or beyond the Missouri River may be billed to any connecting line in East St. Louis via Burlington Elevator in St. Louis, for transfer. On all grain so billed and not stopped on hold track for inspection and sampling there will be no charge made for delivering to East St. Louis, and such grain will be held in elevator thirty days before being ordered forwarded as billed." This was accepted as affording elevator privileges not granted by the eastern roads in the recent rate cut, which was supposed to offset the divergence of grain to gulf ports, but which has not been satisfactory, according to the grain men. The Burlington was one of the roads involved in the discrimination. This particular case is only one of numerous grievances against the railroads affecting St. Louis. President Teichman, at the instance of the transportation committee, has appointed the following members a special committee to take up the discrimination against St. Louis in the matter of rates: W. P. Kennett, chairman of the traffic bureau; W. H. Danforth, chairman of the transportation committee; E. H. Langenberg, George F. Powell and E. S. Tompkins. The committee will go to Chicago and elsewhere to confer with traffic officials of the leading roads to secure an adjustment to relieve the present conditions.

The past month has witnessed a remarkable "rate war" between the Gulf roads and the Western trunk lines. The fight has been on corn and the rates have been slashed in every direction. When the war began the rates were 18 cents from Omaha to New Orleans and 8 cents from Omaha to St. Louis. A number of reductions were made by the Gulf roads, the rate being reduced to 13½ cents from Omaha to New Orleans. This was met by the Chicago lines, which made a through rate of 18½ cents from Omaha to New York. On February 1 the Missouri Pacific telegraphed a tariff to the Interstate Commerce Commission at Washington, quoting a rate of 11 cents from Omaha to New Orleans, 10 cents to Memphis and Little Rock, and 5 cents to St. Louis. Following this "midnight

tariff," so called, all the Western roads joined in making rates on corn for export from the Missouri River via Chicago, St. Louis and Peoria to New York, 13 cents; to Philadelphia, 12 cents; to Baltimore, 11½. One feature of the war has been the reduction of corn rates from Iowa points to Chicago to a basis of 12 cents per hundred. At the present writing the situation is in a state of flux. It is evident that a settlement of some kind must be effected at an early date. It is possible that the important question of a proper division of export business between the Gulf and the Atlantic ports will receive attention in this settlement. Indeed, a step in this direction has already been made, at a meeting of representatives of the exchanges held in New York on February 9. This meeting was called before the Eastern trunk lines had made a move to give the Atlantic seaboard relief from the sharp competition of New Orleans and Galveston. It was postponed from time to time until the resulting war had settled down to a matter of endurance. Every exchange from Boston to Baltimore was represented, and it was hoped by the railroad men that such a conference would be able to decide on a differential between ports on the Atlantic and those on the Gulf of Mexico, and as soon as this had been done the railroads could get together and try to establish peace on the proposed basis.

LATE PATENTS

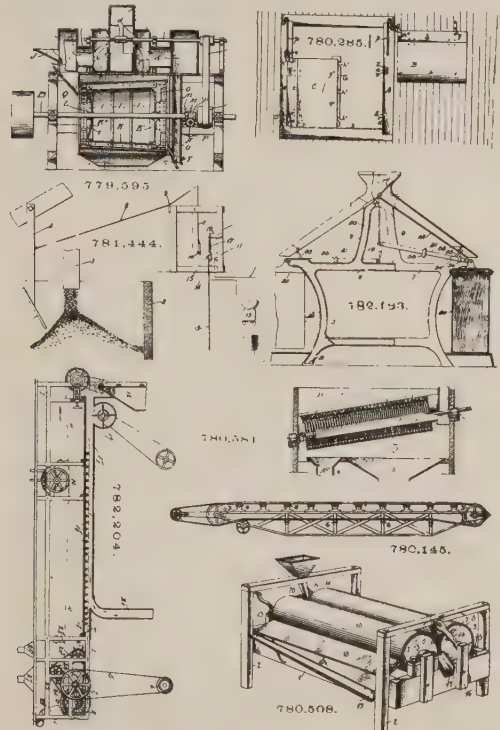
Issued on January 10, 1905.

Conveyor.—Wesley Carr, Port Sunlight, England. Filed Aug. 4, 1903. No. 779,465.

Wheat Cleaning and Scouring Machine.—Mark A. Griffin, Sleepy Eye, Minn. Filed Nov. 4, 1904. No. 779,595. See cut.

Issued on January 17, 1905.

Belt Conveyor.—Louis K. Vaughan, Oroville, Cal. Filed Aug. 18, 1904. No. 780,145. See cut.



Grain Car Door.—Edward D. Hammond, St. Cloud, Minn. Filed Aug. 2, 1904. No. 780,285. See cut.

Issued on January 24, 1905.

Seed Separator.—James M. King, Rochester, N. Y. Filed Sept. 28, 1904. No. 780,508. See cut.

Grain Grader.—George H. Rich, Chicago, Ill. Filed April 22, 1904. No. 780,581. See cut.

Issued on January 31, 1905.

Automatic Alarm for Grain Bins.—Hans L. Moebeck, Ulen, Minn., assignor of one-half to N. O. Henricks, Fargo, N. D. Filed March 10, 1904. No. 781,444. See cut.

Portable Endless Conveyor.—William L. McCabe, Seattle, Wash. Filed Feb. 25, 1903. No. 781,614.

Issued on February 7, 1905.

Telescopic Conveyor.—David D. D. Plunket, Bitton, England. Filed March 3, 1904. No. 782,050.

Machine for Bagging and Weighing Grain.—James B. Williams, Minden, La., assignor to Will-

iams Bros. & Snider, Minden, La. Filed Jan. 20, 1904. No. 782,183. See cut.

Process of Separating Seeds.—Thomas M. Prine, Toledo, Ohio. Filed June 6, 1904. No. 782,204. See cut.

WHY IT POPS.

We all know what popcorn is. We have seen it in the ear. We have seen it when shelled. We have eaten it from the saucer or in the ball, salted or sweetened. Most of us have indulged in popcorn at the circus. Many of us have gathered with loved ones around the family hearth and watched it as it popped. But how many of us have learned why it pops? How many of us have cared to discover what may be called the principle of the popcorn pop? Very few. Why? Because most of us have been interested in the solution of other and equally important questions.

The time was certain to come, however, when this and allied questions would be raised. And the time has come, as a matter of fact, for a correspondent has put the following questions to the Department of Agriculture:

1. Why does popcorn pop?
2. Why doesn't ordinary corn pop like popcorn?
3. What is the composition of popcorn and why does it differ from ordinary corn?
4. Why does popcorn pop better when thoroughly dry?

It is one of the glories of our republican form of government that it employs men in every department who are specially qualified to answer any question that may be addressed to it. One would suppose at first glance that these questions would embarrass the information bureau of the Agricultural Department. Not at all. Scarcely had they been received before the popcorn expert had set to work, and, in less time that it takes to tell, the following answers were on the way to the anxious inquirer:

1. The popping of popcorn is due to volatilization of the oil contained in the kernel.
2. Field corn does not pop as readily as popcorn because the outer portion of the kernel is more porous, permitting the escape of the oil as it volatilizes, while in the case of popcorn a great pressure is developed in the kernel by the confined oil and the kernel is suddenly exploded and turned wrong side out.
3. In composition popcorn differs from ordinary corn in having a larger proportion of corneous element and a great per cent of oil.
4. Popcorn pops more readily when dry because when moistened the kernels are swollen, more porous and toughened and do not explode so suddenly and completely as when dry and hard.

This settles the whole popcorn question. It was, after all, simple.—Inter-Ocean.

THE WEST TAKING LEAD.

A prominent Brooklyn preacher lately told his congregation of New York business men that the seat of power in the United States no longer rests in the East, but has passed to the West; that the really big things of the age are now done by Western men, and that unless the East shall rouse itself from its self-complacent dream and open its eyes to facts, its relative influence in the nation will continue to diminish. The picture may have been painted in too high color, but in the main it is true, says Youth's Companion. Western men and Western states have grown greatly in political influence; Western ideas constantly gain weight in national politics; Western banks become more independent of Eastern financiers. The change is due, no doubt, partly to natural conditions. Big problems and a big country breed large men and liberal ideas. They make for progress rather than for conservatism. But an interesting sidelight appears in some recent remarks of an Eastern college president who went West a few years ago, and is now at the head of a state university. "When I was in the East," he said, "I had to prod my students to work. Here they prod me. The West is no place for a lazy professor. If he is teaching in a college where the elective system prevails, he will soon find himself without pupils." Another Western professor speaks almost in the same vein: "I have never known my students out here to complain of the length of the tasks set for them, of the difficulty. Eastern students used to groan over the same amount of work." If, then, the West is forging ahead of the East, the explanation seems to be a rather simple one. Getting at it early, sticking to it closely and keeping at it long will surely show results, whether in the classroom or in the wheat field.—Ex.

The chief grain inspector of Manitoba, in a report on the grain movement in the period from the opening of the crop of 1904 to the purchase up to and including the 31st of December, says the movement of wheat was 25,812,150 bushels, or 3,156,150 more than in 1903.

FLAXSEED

December exports of flaxseed amounted to 18 bushels, valued at \$37, against 133,432 bushels, valued at \$135,908, for the preceding December. For the twelve months ending with December the exports of flaxseed aggregated 26,646 bushels, valued at \$27,803, against 1,157,953 bushels, valued at \$1,318,839, for the corresponding period ending with the preceding December.

Imports of flaxseed for the month of December were 4,460 bushels, valued at \$5,239, against 4 bushels, valued at \$11, for the preceding December. For the twelve months ending with December 293,602 bushels of flaxseed, valued at \$268,964, were imported, as compared with 13,505 bushels, valued at \$19,233, for the corresponding twelve months ending with the preceding December.

A movement is on foot at Bellows Falls, Vt., to revive the raising of flax in that section. A. J. Cote of Waltham, Mass., proposes to erect a linseed oil mill if he is granted exemption from taxation and the farmers will agree to raise sufficient flaxseed to supply the plant. He has submitted the matter to the Bellows Falls Board of Trade and the Fall Mountain Grange. Mr. Cote formerly operated a linseed oil mill at Waltham. He proposes to erect a three-story brick building, 182x42 feet in size, at Bellows Falls and install the necessary machinery if his plan receives the required encouragement. There was formerly a linseed oil mill at Bellows Falls, it being one of the first plants erected there previous to 1824.

A St. Paul, Minn., dispatch under date of January 29, says:—"The United States department of agriculture and the Minnesota experiment station in co-operation with the experiment stations of North and South Dakota have originated a new variety of flax which is hoped to increase the average yield per acre throughout the flax-growing states. The new variety has been named 'Minnesota No. 25' or 'Primost,' and the claim is made that it will increase the value of the Minnesota flax crop \$2 per acre. On the basis of 600,000 acres, the average flax acreage in Minnesota, this will mean an increase of \$1,200,000 to the flax growers of the state when the new variety becomes established. The Minnesota experiment station has secured 1,200 bushels of the seed, which will be distributed throughout the state in four-bushel lots as a foundation for the stock. This seed will be sold at \$2.50 per bushel to farmers who have proper machinery and buildings for handling seed grain and whose land is free from mustard, Russian thistle and other weeds the seed of which is difficult to separate from flax seed. The land must also be free from the disease known as flax wilt. Minnesota No. 25 or Primost flax is selected stock from a variety which came to the Minnesota experiment station from the United States department of agriculture in 1891."

The Daily Market Record of Minneapolis, under date of January 26, has the following concerning flaxseed conditions: "During the past year the range in prices of flaxseed has not been wide, having varied less than for some years previously. In 1899, with a world crop of 68,553,000 bushels, the maximum price of \$1.30 was the highest that had been made in many years. Following the 1899 crop, prices remained high for the 1900 and 1901 crop, the world crop for these two years being small. The past year and previous years has shown a large increase in production. Argentina alone in 1903 more than doubled its production of 1901 and of 1902, and in 1904 added 7,350,000 bushels to the large yield of 1903, making a total yield of 36,911,000 bushels in Argentina the past crop year. World's shipments of flaxseed to Europe the past year have been 64,512,000 bushels, against 51,296,000 the previous year, and 35,176,000 bushels in 1902. 32,520,000 in 1901 and 31,192,000 in 1900. Inquiries these two last mentioned years, for export, were light, and importers only took what actual requirements demanded, evidently deterred by the fancy prices that prevailed in those seasons. In 1902 and 1903, as lower values began to appear, inquiry increased, and the past season buyers have taken flaxseed to an abnormal extent. It would not seem that these large stocks have been consumed, but much probably is held in stock by various users of oil. If this is the case, the demand for 1905 can hardly equal that of 1904. With prospects of a large surplus for export from Argentina and India, the coming season, though somewhat smaller than the past year, there seems to be no prospect of higher prices."

Prison bags are now offered at San Quentin, Cal., at 5½ cents each, subject to change on short notice.

For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

BAGS FOR SALE.

10,000 second-hand, 2-bushel grain bags, 10,000 140-pound export flour bags, 5,000 5-bushel oat bags. Cheap.

WILLIAM ROSS & CO., 57 So. Water St., Chicago, Ill.

KANSAS MILL FOR SALE OR TRADE.

Prefer to sell half interest. Capacity of mill, 150 barrels. Over 500,000 bushels of wheat bought at this station yearly. Prospect for coming crop, 100 per cent. Mill cost \$15,000; will sell half interest for \$5,000. Easy terms. Correspond with

JAMES SHEERAN, Solomon, Kan.

GRAIN AND SEEDS

WESTERN HEADQUARTERS

For Alfalfa, Clover, Timothy, Millet, Sorghum and Kafir Corn. Write for prices.

MISSOURI SEED CO., Kansas City, Mo.

OATS AND CORN.

For sale, 2,000 bushels of seed turf (winter) oats. Also 15,000 bushels white milling corn. Address

JOHN A. TYNER & CO., Nashville, Tenn.

FOR SALE.

Several cars of good No. 1 and No. 2 timothy hay and two cars No. 1 long rye straw; also No. 3 hay and oat straw. Address

SPENCER BILLINGTON, Fultonville, N. Y.

SCALES

SCALES FOR SALE.

Scales for elevators, mills, or for hay, grain or stock; new or second-hand at lowest prices. Lists free.

CHICAGO SCALE CO., 299 Jackson Boulevard, Chicago, Ill.

SCALES FOR SALE.

Fairbanks Standard Scales at 70-80 per cent discount (new); don't pay any more; don't buy second-hand scales when you can get the genuine Fairbanks Standard, new, for less money. Address for particulars.

P. O. BOX 194, Chicago, Ill.

MACHINERY

ATLAS ENGINES.

For sale, 15, 20 and 25 horsepower Atlas Engines and Boilers in A-1 condition. Prices low.

WALLACE MACHINERY CO., Champaign, Ill.

FOR SALE.

One 15-horsepower engine, 20-horsepower boiler, f. o. b. Dwight, Ill. Price, \$150. Address

MERRITT BROS. & CO., Dwight, Illinois.

ELEVATORS

ELEVATOR FOR SALE.

Capacity 10,000 bushels, located at West Concord, Minn. Good crops. Address

C. W. FAIRBANK, West Concord, Minn.

FOR SALE.

Elevator and hay warehouse at Aboite, Ind. In the finest grain section of the state. Large flour exchange trade. Good point for retail coal and feed trade. Handles 100 to 200 cars of hay every season. Write

S. BASH & CO., Fort Wayne, Ind.

KANSAS ELEVATORS.

Elevators for sale in Kansas. Address
E. J. SMILEY, 37 Crawford Bldg., Topeka, Kan.

FOR SALE.

Western Iowa elevator for sale. Capacity, 8,000 bushels, with 5-horsepower gasoline engine; in town with two lines of railroad and good grain station. Address

LOCK BOX 188, Ida Grove, Iowa.

FOR SALE.

A first-class elevator, 30,000 bushels' capacity, on very easy terms; price, including machinery, \$3,700. Write at once.

THE LOCATORS, 63 Merchants' Bank Bldg., Winnipeg, Manitoba.

FOR SALE.

Grain elevator, coal and ice business in city of 10,000, county seat of richest agricultural county in Ohio. Building contains nine coal bins, capacity 600 tons; icehouse, plaster and cement storage room, grinding room, containing New Kellie Cob Mill; corn sheller, Clipper Grain Cleaner; grain elevator capacity 800 bushels per hour; elevator bins, capacity 8,000 bushels. Garr Scott Engine, 25 h. p.; boiler, 60 h. p.; shafting and belting complete. Side-track running full length of property. Horses, harness, wagons. Coal and ice tools complete; finest wagon scales, office building in addition. Address

HURON COUNTY REAL ESTATE CO., Norwalk, Ohio.

Miscellaneous & Notices

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

KANSAS MILLS AND ELEVATORS BOUGHT AND SOLD.

I make a special business of selling and trading Kansas mills and elevators. Being centrally located in the great wheat belt of Kansas I look after sales and purchase personally. Write me.

JAMES SHEERAN, Solomon, Kan.

MAKE YOUR WANT KNOWN.

There are few mind readers and when you want to convey an idea to a grain shipper or receiver it's best to either put it in type or shout it at him. The "American Elevator and Grain Trade" reaches a large class of readers who will read your wishes if you have them put in type in these columns.

TO EXCHANGE.

Three tracts of desirable rice land located near Houston, Texas. I will trade either or all three of these tracts on a fair basis for grain elevator property. If you want to turn your elevator into cash immediately, you will not be interested in this advertisement; if however, you are willing to make an investment in cheap land in a growing country and are willing to wait four or five years, you will be interested. Not only will this be the means of your getting your cash out of your property, but in the meantime the land will have advanced and you will have excellent returns on your investment. Address

W. C. BRIDGE, Attica, Ind.

ELEVATORS WANTED

ELEVATOR WANTED.

Kansas or Nebraska elevator wanted for cash. Address

BOX 574, Hutchinson, Kan.

ELEVATOR WANTED.

In corn and oats territory of Illinois or Western Indiana handling not less than one hundred thousand bushels per annum, located in a town having bank and schools. Gas engine power preferred. Address, with description and terms,

MANAGER, Box 834, Auburn, Ind.

SITUATION WANTED

POSITION WANTED.

Elevator man, experienced in handling all kinds of grain, desires position as superintendent or office man. Address

SUPERINTENDENT, Box 2, care "American Elevator and Grain Trade," Chicago, Ill.

GRAIN WANTED

GRAIN WANTED.

Wanted—Feed barley and new No. 2 and No. 3 rye.

W. H. SMALL & CO., Evansville, Ind.

HAY WANTED.

We want to buy choice No. 1 and good No. 2 timothy hay. Highest market prices paid. Prompt returns.

E. A. WILLIAMS, Cleveland, Ohio.

WINTER WHEAT WANTED.

Shippers of winter wheat will do well to communicate with us. We take C. & O. or Kanawha & Michigan delivery.

TURLEY & STEELE, Brokers, Charleston, W. Va.

MACHINERY WANTED

MONEY IN YOUR POCKET.

If you want to change that second-hand machine into money advertise it in this department. Or if you have a grain elevator to sell or rent, or wish to buy, make your wants known through these columns.

FOR SALE.

75 H. P. (at 80 lbs.' steam pressure) Horizontal Slide Valve Engine, rebuilt by us. In thoroughly good condition. Can be seen at our works. Price, \$250, f. o. b. Chicago.

H. W. Caldwell & Son Co., Chicago, Ill.

FOR SALE

Paxton Mill,	-	Harrisburg, Pa.	1,200 bbls.
Swartley Mill,	-	Doylestown, Pa.	120 "
Mingle-Fulmer Mill,	-	Hatboro, Pa.	100 "
York Mill,	-	York, Pa.	200 "
Gochner Mill,	-	Boiling Springs, Pa.	100 "
Columbia Mill,	-	Columbia, Pa.	150 "
Loucks-Codorus Mill,	-	York, Pa.	125 "
Freed Mill,	-	North Wales, Pa.	100 "
Stony Creek Mill,	-	Norristown, Pa.	50 "

C. H. DEMPWOLF, YORK, PA.

Burlap Bags!! Grain Bags!!

ALL SIZES MADE TO ORDER

W. J. JOHNSTON, 182 Jackson St., Chicago.

ROOFING AND SIDING.

SYKES STEEL ROOFING CO.

611 So. Morgan Street, Chicago



MAKERS OF FIREPROOF WINDOWS

WE manufacture all gauges of corrugated iron, either painted or galvanized. We make Patent Cap Roofing, Roll Cap Roofing, "V" Crimped Roofing, Metal Ceilings, etc., etc.

We make a specialty of

Corrugated Iron and Metal Roofing For Grain Elevators

And take contracts either for material alone or job completed. Write us for prices. We can save you money.

GRAIN RECEIVERS

BUFFALO

W. W. ALDER

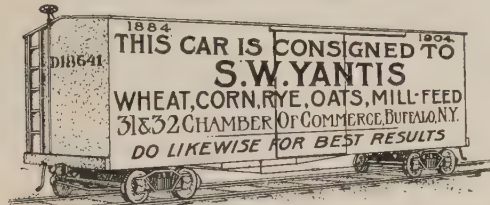
T. J. STOFER

Alder & Stofer

COMMISSION MERCHANTS

We do not buy any grain, but handle on commission, and solicit your Buffalo consignments.

83 Chamber of Commerce,
BUFFALO - NEW YORK



Consign Your Grain to

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QUICK SALES. IMMEDIATE RETURNS. RELIABLE REPORTS.
Members Grain Dealers National Association.

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BROKERS AND FORWARDING AGENTS

New Orleans, La.

Consignments and Correspondence Solicited.

INDIANAPOLIS

The Wm. S. Gilbreath Seed Co.

WHOLESALE
FIELD SEED MERCHANTS
INDIANAPOLIS, IND.

Buyers and sellers of Field Seeds will do well to correspond with us; we handle in large quantities:

Red Clover, White Clover, Red Top, Hungarian, Kaffir Corn,
Timothy, Alfalfa, Orchard Grass, Dwarf Essex Rape, Peas,
Alsike, Blue Grass, Millets, Cane,

Send us your samples or ask for ours

New 'Phone 4313

Old 'Phone 4380

Robinson's Cipher

NATIONAL GRAIN & HAY CO.

Grain, Hay, Flour and Feed Commission

Top Market Prices—Quick Returns

46 Board of Trade,

INDIANAPOLIS, IND.

PITTSBURG

GEIDEL & CO.,

COMMISSION MERCHANTS
GRAIN, HAY AND STRAW.

MEMBERS OF
National Hay Association.
Pittsburg Grain and Flour Exchange.
Grain Dealers' National Association.

PITTSBURG, PA.

WE USE ROBINSON'S AND HAY AND GRAIN CIPHERS.
Official Market Report Mailed Regularly on Request.

C. A. FOSTER

McCance Block, Cor. Seventh Ave.
and Smithfield St., Pittsburg, Pa.

Established 1878

Wholesale Grain, Hay and Mill Feed

CONSIGNMENTS SOLICITED

References: The Colonial Trust Co., Pittsburg, Pa.

HAY

GLOVER HAY

We are in a position to place this commodity to the best advantage. Write us for special billing.

DANIEL McCAFFREY'S SONS CO.
PITTSBURG, PA.
ESTABLISHED 1867

References: Washington National Bank,
Duquesne National Bank.

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Hay, Corn, Oats

Rooms 4 and 5, No. 8 Wood Street
PITTSBURG, PA.

Will buy outright or sell on usual rates of commission.
Liberal Advancements made on Consignments

KEIL & THORNE

RECEIVERS OF
GRAIN, HAY AND STRAW

Consignments Solicited
7th Avenue and Smithfield St. PITTSBURG, PA.

Write us for official Price Current, mailed regularly
References—Third National Bank; Germania Savings Bank

D. G. STEWART

PITTSBURG, PA.
WHOLESALE DEALER IN
GRAIN, HAY and MILL FEED

Proprietor Iron City Grain Elevator
CONSIGNMENTS SOLICITED

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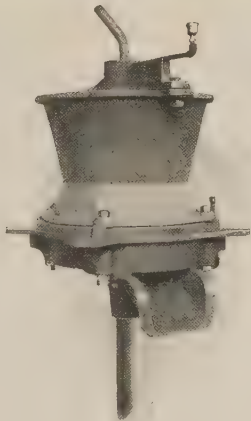
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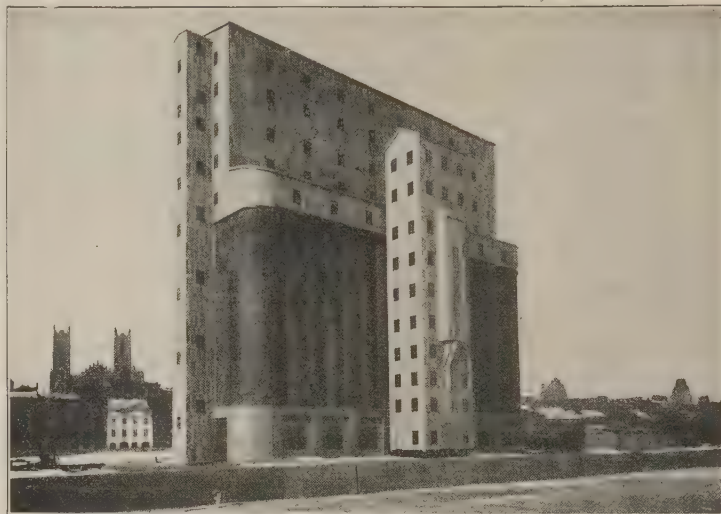
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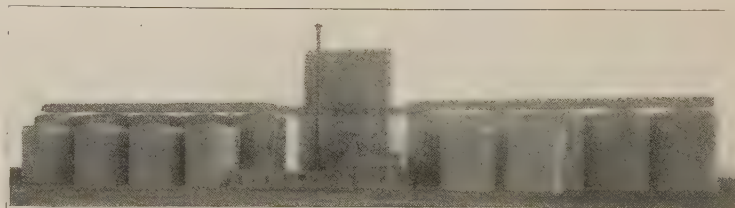
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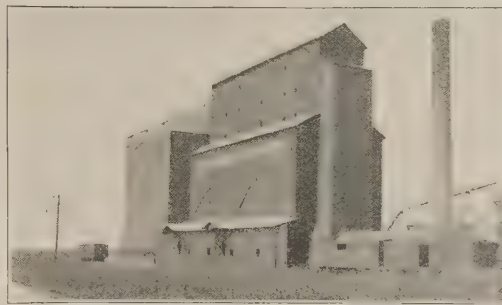
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North Star Malting Co., "	500,000	David Stott Milling Co., Detroit,	200,000
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Prisco Ry. Elevator, Kansas City,	700,000		

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Washburn-Crosby Milling Co., Buffalo,	300,000	Millbourne Mills Co., Philadelphia,	200,000

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C. St. P. M. & O. Ry. Co., Itasca,	1,125,000	Grand Trunk Elevator, Portland, Me.,	1,000,000
Belt Line Elevator, Superior,	2,500,000	F. H. Peavey & Co., No. 1,	1,750,000
Superior Terminal, Superior,	2,500,000	Interstate Elevator, Minneapolis,	1,000,000
Pittsburg & West Ry., Fairport, O.,	1,000,000	Texas Pacific Ry. Co., Westwego, La.,	1,000,000
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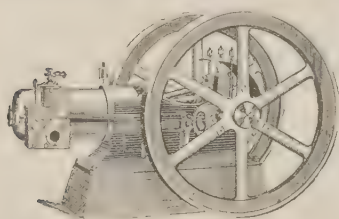
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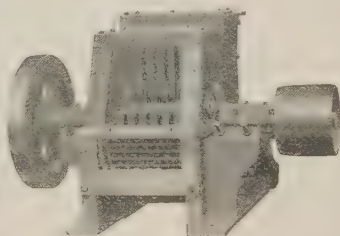


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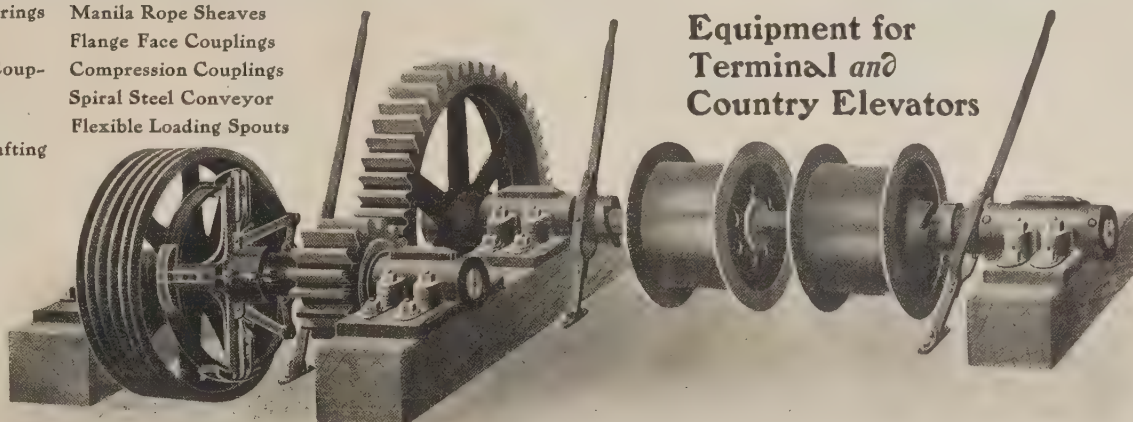
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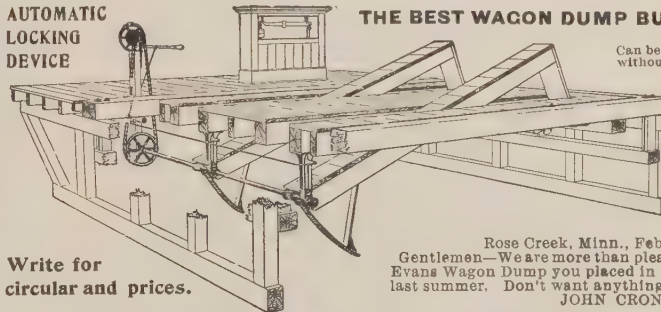
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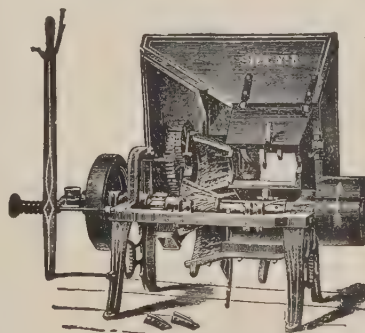
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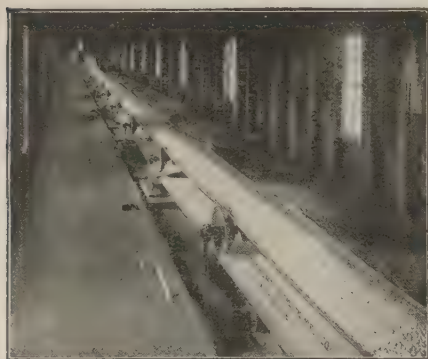
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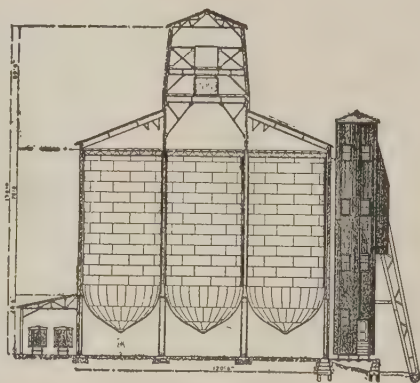
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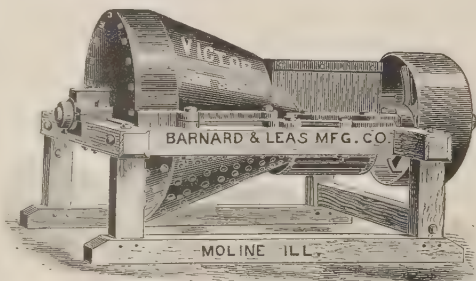
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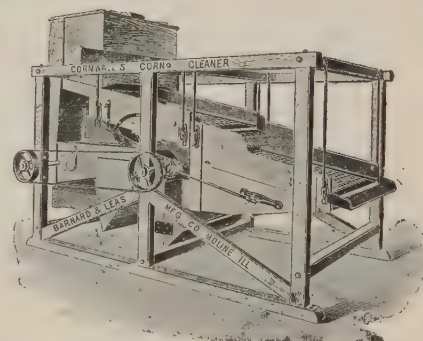


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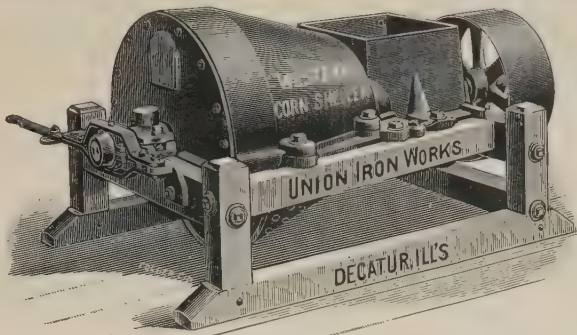
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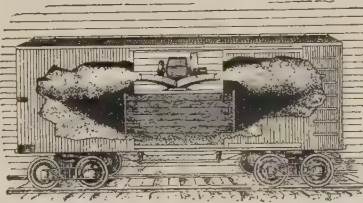
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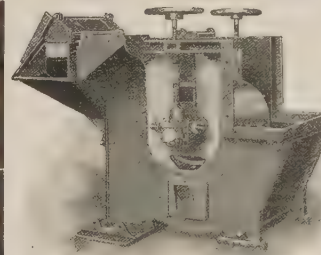
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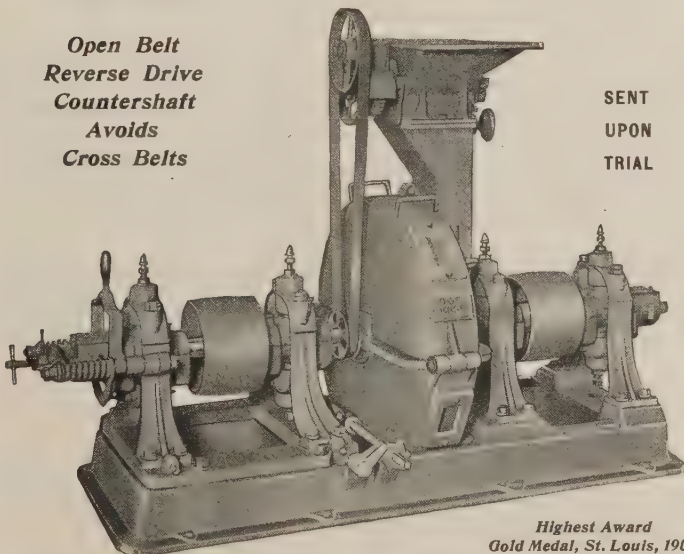
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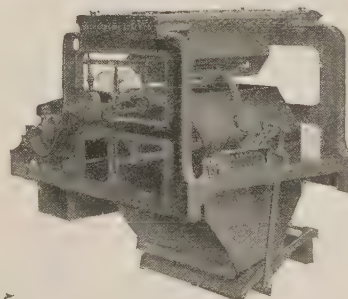


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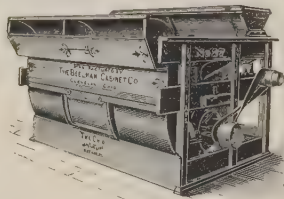
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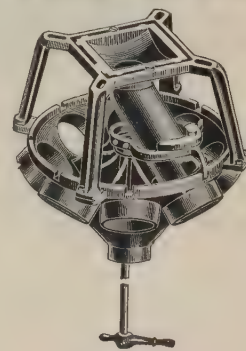
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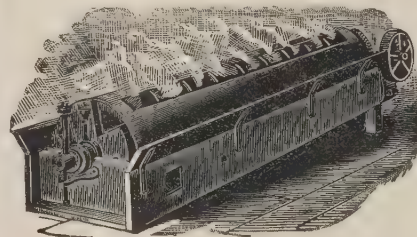
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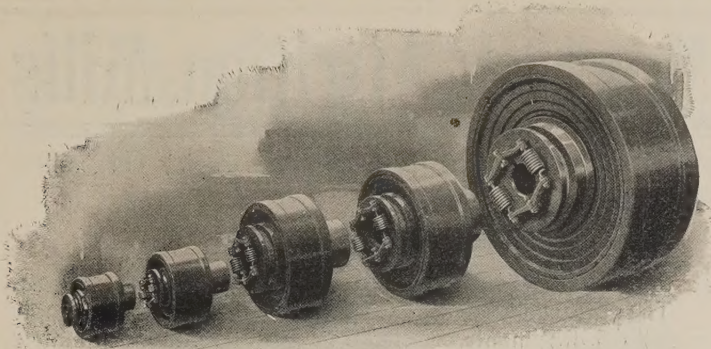
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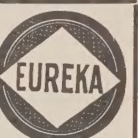
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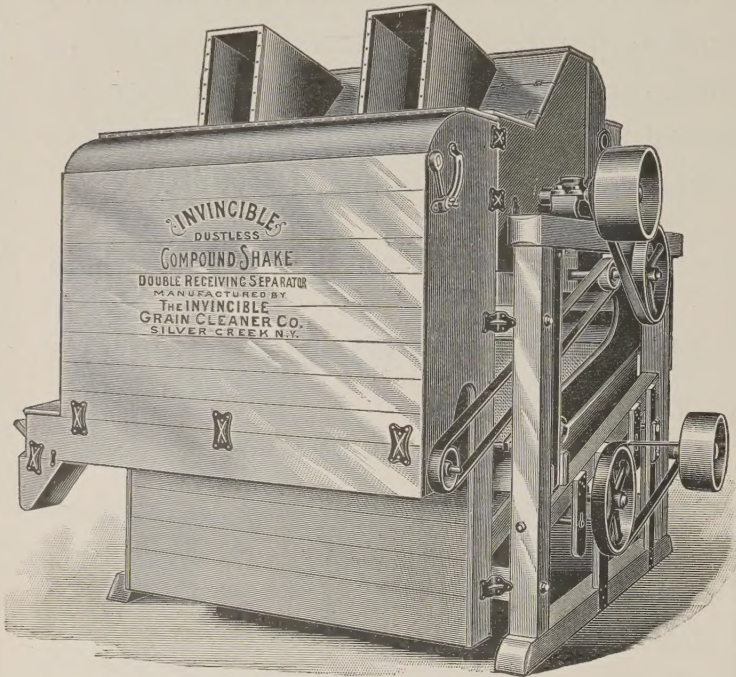


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Monarch Attrition Mills

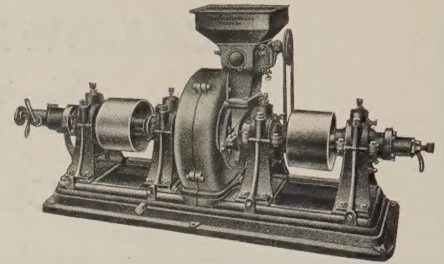
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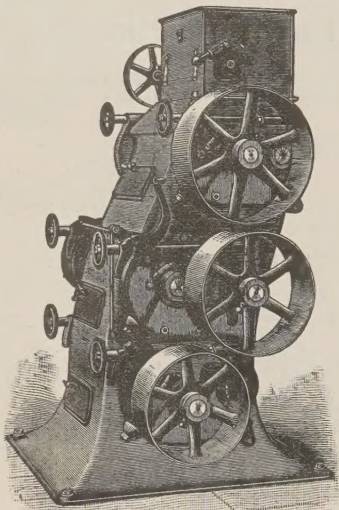
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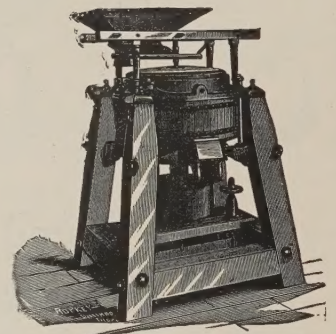
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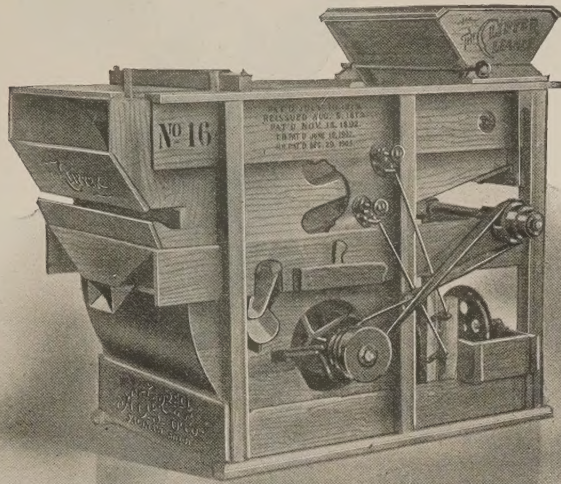
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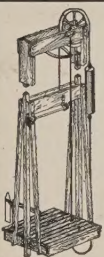
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The No. 16 shown in cut has Traveling Brushes on both screens, has single air drum instead of double as on larger machines, and is unequaled where a seed or grain cleaner of moderate capacity is required. Our price on this machine is extremely low, considering that it has all the late improvements and is strictly up

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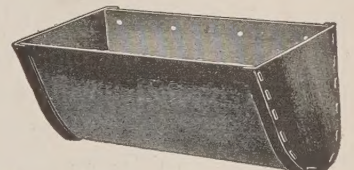
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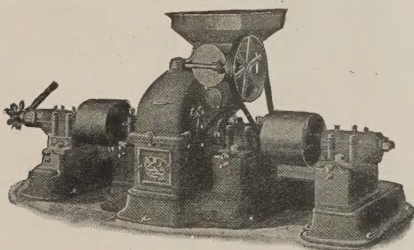
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The Unique Attrition Mill

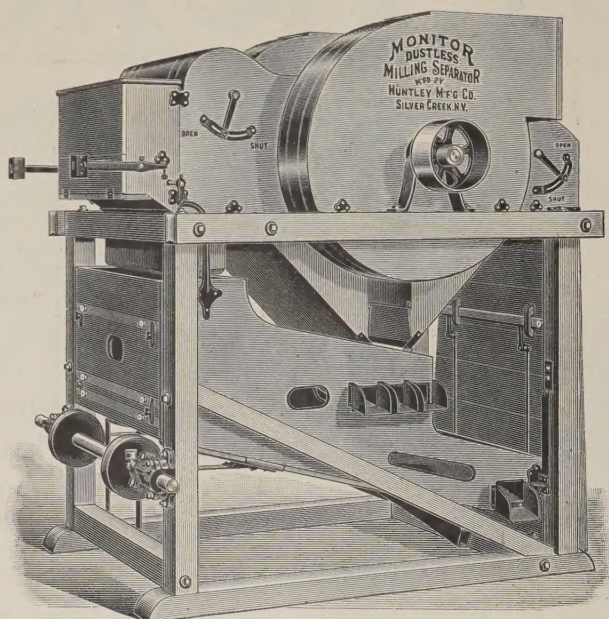
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